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ABSTRACT

Act 619 of the 1984 Louisiana legislative session initiated the State-Funded Program for High-Risk Four-Year-Olds, which is intended to improve the school readiness of preschool students. This document is the program evaluation report for 1990 and 1991. Part 1 of the report is a comprehensive program description which provides information on: (1) program characteristics; (2) expenditures per pupil in school systems participating in the program; and (3) the proportion of eligible children participating in the program. Recommendations for improving the quality of the program are offered. Part 2 discusses the results of a follow-up study that focused on the grade level progression and classroom performance of former program participants. Results indicated that among former participants, 78 percent were at the expected grade level in their progression through school, and between 61 and 98 percent were rated by their present teachers as being at or above their class average in seven developmental areas. Recommendations for increasing program funding and facilitating longitudinal studies of program participants are offered. Part 3 examines the instructional techniques used in the local projects participating in the state-funded program and the academic performance of former program students now enrolled in grades 3 through 5. Results of classroom observations and standardized tests indicate that developmentally appropriate techniques are in use in local programs, and that former program students perform as well as other third and fourth grade students in mathematics and language arts. Appendices in each of the three parts provide materials related to the program evaluation. (BC)

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1990-1991 State-Funded Program for High-Risk Four-Year-Olds
Evaluation Report: Part I. Program Description

1990-1991 State-Funded Program for High-Risk Four-Year-Olds
Evaluation Report: Part II. Follow-Up Study

PART III

1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS EVALUATION REPORT: COMPREHENSIVE LONGITUDINAL REPORT

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1990-1991 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description

Prepared by
The Bureau of Evaluation
Office of Research and Development
Louisiana Department of Education

Presented to
The Bureau of Elementary Education
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Preface

The State-Funded Program for High-Risk Four-Year-Olds is one of a cluster of programs for preschool-aged children from environments that have characteristics that are statistically associated with lack of success in school. Other programs for high-risk preschool children include those sponsored by ESEA Chapter 1, Head Start, and Special Education. Despite evidences attesting to the value of such early-intervention programs in promoting readiness for first grade, large numbers of eligible children still do not have access to any program to help prepare them for success in school.

The State-Funded Program for High-Risk Four-Year-Olds has been in operation since the 1984-85 school year. The 1990-91 evaluation report will provide information comparable to the previous annual evaluation reports, but will be organized to provide a three-part series. Part I will provide a comprehensive program description; Part II will provide follow-up study findings; and Part III will provide both classroom observation information and the results of a comprehensive longitudinal study of pupil progression.

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EXECUTIVE SUMMARY

Program Purpose and Background

The State-Funded Program for High-Risk Four-Year-Olds is one of several programs designed to increase the readiness of preschool-aged children for success in school. Collectively, Head Start, ESEA Chapter 1, the Special Education Pre-School Screening Program, the State-Funded Program for High-Risk Four-Year-Olds, and other smaller programs presently serve approximately three-fourths of the eligible high-risk children. This proportion is a marked increase from the 55 percent served last year; nevertheless, approximately 6,815 of the at-risk four-year-old children in the state could not be served in 1990-91.

The State-Funded Program for High-Risk Four-Year-Olds was initiated through Act 619 of the 1984 Legislative session. It has expanded from 10 Local Education Agencies (LEAs) serving 315 children, funded at a total of $300,000 in the 1984-85 school year, to 63 of the 66 LEAs serving 1751 children and funded from the State and the Quality Education Trust Fund 8(g) totalling $3,501,500 in 1990-91. A total of 8945 children have been served since 1984.

Management and Organization of the Evaluation

In addition to individual project evaluation reports from the LEAs, required by statute, the Bureau of Elementary Education has continued to request that the Bureau of Evaluation and Analytical Services conduct annual overall evaluations of the implementation and effectiveness of the program. The present report is Part I of the three-part 1990-91 evaluation report series. Part I provides a comprehensive program description; Part II will provide follow-up study findings, and Part III will provide both classroom observation findings and the results of a comprehensive longitudinal study of pupil progression.

The purpose of the overall evaluation is to provide information to decision-makers at the state and local levels to assist them in making judgements about the extent to which the intended goals of this early childhood education program in the public schools have been attained and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing administrators of individual projects with information for use in decision-making about continuing, modifying, or developing new projects for high-risk four-year-old children.

In the following paragraphs the three evaluation questions to be addressed by Part I will be stated, and the conclusions and recommendations relating to each will be provided.

Conclusions and Recommendations

Evaluation Question 1: What are the characteristics of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

The LEAs, choosing to participate in the program, continue and expand their participation as funding and space are available. One LEA entered the program for the first time in 1990-91; 12 have been in the program 3 years; 12 for 5 years; 29 for 6 years, and 9 for 7 years. Most LEAs opt for full-day rather than the half-day programs. Most classes enroll the maximum number of children permissible. Currently, all participating LEAs have at least one full-time teacher and one full-time aid in each program classroom.

The program is, in the view of participating LEA staff members, in keeping with recognized principles of effective preschool education. Respondents to the Project Description Survey rate the instructional program itself as the major strength of the individual projects. The developmental approach is identified as the major factor in program effectiveness. This approach is defined by the Adapted Early Childhood Environmental Rating Scale which is used in classroom observation by state supervisors. In the assessment of pupil progress, nearly all of the teachers (97-98%) use classroom observation and parent interviews. All teachers (100%) use pretests and posttests.

Transportation, to ensure that eligible children have access to participate in the State-Funded Program for High-Risk Four-Year-Olds, remains a problem at some sites. Although most (77.8%) of the LEAs believe the eligible children have sufficient transportation, three (11.1%) believe those who are most in need do not have access, and two indicate an access problem by one-half or fewer of the eligible children in their school systems.

All LEAs are in compliance with the participant selection criteria. In 1990-91 seventy-seven of the eighty-eight teachers in the State-Funded Program for High-Risk Four-Year-Olds had nursery (N) and/or kindergarten (K) teaching certificates. The others fulfill the provisions for the temporary certificate or Circular 665 approval. The number and proportion of N and K-certificated teachers have improved since the inception of the program in 1984-85.

The characteristics of the participating children appear to be those that are generally associated with high risk of school failure and dropping out of school. Since some LEAs did not provide complete and timely responses to all items on the Project Description Survey, some conclusions are still subject to change. Approximately two-thirds of the children are black, and one-third are white. All of the children come from homes with annual incomes under $15,000. Nearly one-half of the heads of household are unemployed; most, for whom information was reported, are unskilled laborers. All LEAs use a state-approved screening instrument in the selection of children.

Parental involvement is an integral part of the State-Funded Program for High-Risk Four-Year-Olds. Over one-half of the LEAs involve parents in workshops and meetings, social activities for the children, and field trips. About one-fourth of the LEAs engage them in making materials, helping with art projects, reading to the children, and helping the children in the cafeteria. Others use a variety of other parental involvement activities.

Program strengths identified by over one-half of the LEAs are: (1) strengths of the developmental approach, (2) administrative and staff support, (3) quality of teachers and aides, and (4) early intervention. Traits generally recognized in the literature of the field, but cited less frequently by the LEAs, suggest focal points for continuing program improvement: (1) parent involvement, (2) community support, (3) health and medical services, and (4) quality of facilities.

Most frequently cited weaknesses were predominantly fiscal, managerial, and articulation problems: (1) late and/or insufficient funding and (2) the eligibility criterion on family income. The weakness citations reinforce the conclusion that there is a need to improve parental involvement. Over one-third (34.9%) of the LEAs express concern for the small numbers of participating parents, and nearly one-third (30.2%) cite the need for more participation in instructional areas. Some weaknesses cited suggest a need to target and coordinate delivery of resources and services, e.g., to improve health and to improve transportation services.

Recommendations. It is recommended that the Bureau of Elementary Education consider the following recommendations in the continuing effort to maintain and to improve the quality of the State-Funded Program for High-Risk Four-Year-Olds:

1. that the program be expanded to increase accessibility to eligible children not now served

2. that the Annual State Conference for the State-Funded Program for High-Risk Four-Year-Olds staff continue to provide a training session for project staff members, with particular attention to improvement of the accuracy, timeliness, and completeness of reports submitted by the local education agencies

3. that a training session on the components of an effective parental involvement program be provided for project staff members

4. that a study be conducted and that recommendations be made to the State Board of Elementary and Secondary Education on the basis of the relative merits of using a fixed amount or sliding scales for the family income criterion for eligibility

5. that staff continue to be encouraged to coordinate services (e.g., transportation and health services) and to avail themselves of interagency coordination opportunities.

Question 2: What is the per pupil expenditure in local school system projects for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

There are 92 children in half-day classes in 1990-91; the total allocation for these classes is $89,916. Per pupil, the average half-day allocation is $977. There are 1659 children in full-day classes in 1990-91; the total allocation for these children is $3,411,584. Per pupil, the average full-day allocation is $2,056. The average per pupil allocation for all of the children is $2,000. Although differences in the data bases preclude precise comparisons, generally these figures compare favorably with per pupil costs for grades K-12. The most recent available figures show the K-12 average was $3153 in 1988-89.

Analyses show that 49,680 pupil contact hours were provided through half-day classes and 1,791,720 pupil contact hours were provided through full-day classes. The per pupil contact-hour cost for the half-day classes was $1.81. The very small proportion of LEAs that continue to offer half-day classes results in both the full-day and the composite (half-day and full-day) classes having costs per pupil contact hour of $1.90.

Recommendation. The 1990-91 findings in response to Question 2 do not suggest a need for recommendations regarding per pupil expenditures by the local projects.

Question 3: What proportion of Louisiana's high-risk four-year-old children are participating in the State-Funded Program for High-Risk Four-Year-Olds?

The number of live births in Louisiana in 1986 was 77,944. These children were four-year-olds in 1990. Approximately one-third (32.9%, N=25,643) are from families with incomes under $15,000. Computation shows that the 1751 children served by the State-Funded Program for High-Risk Four-Year-Olds in 1990-91 constitute only 6.8% of those eligible with respect to the income criterion.

Dividing the number of eligible children (25,643) into the total number of children served by the program (18,828) yields a Service-to-Eligibility ratio of 73.4. This figure is a marked improvement over 1989-90 when the ratio was 55.3.

Recommendation. The 1990-91 findings in response to Question 3 point up the previously stated recommendation to make the program accessible to all eligible children (Question 1, Recommendation 1).

Summary of Recommendations

The 1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description recommendations are that the Bureau of Elementary Education consider the following items in the continuing effort to maintain and to improve the quality of the program:

1. that the program be expanded to increase accessibility to eligible children not now served

2. that the Annual State Conference for the State-Funded Program for High-Risk Four-Year-Olds staff continue to provide a training session for project staff members, with particular attention to improvement of the accuracy, timeliness, and completeness of reports submitted by the local education agencies

3. that a training session on the components of an effective parental involvement program be provided for project staff members

4. that a study be conducted and that recommendations be made to the State Board of Elementary and Secondary Education on the basis of the relative merits of using a fixed amount or sliding scales for the family income criterion for eligibility

5. that staff continue to be encouraged to coordinate services (e.g., transportation and health services) and to avail themselves of interagency coordination opportunities

1

INTRODUCTION

The State-Funded Program for High-Risk Four-Year-Olds was created by the 1984 Louisiana Legislature. Its purpose is to improve the readiness of eligible children for success in school.

Background

During the 1984 Legislative Session, funds were provided through Act 619 to establish 10 early childhood pilot projects for the 1984-85 school year. The growth of the program since that time is shown in Table 1 and described in the following paragraphs.

Table 1. State-Funded Program for High-Risk Four-Year-Olds Overview, 1984-85 through 1990-91

PROGRAM PER PUPIL YEAR EXPENDITURE*	FUNDING		NUMBER OF LEAS	NUMBER OF CHILDREN	COST PER CHILD
	SOURCES	AMOUNTS			
1984-85	State	$ 300,000	10	315	952.38
1985-86	State	2,124,300	37	1112	1910.34
1986-87	State	1,800,000	50	1272	1415.09
1987-88	State	1,700,000	50	1228	1384.36
1988-89	State 8(g)	1,500,000 1,400,000	62	1614	1796.78
1989-90	State 8(g)	1,501,500 1,595,000	62 62	1653	1873.26
1990-91	State 8(g)	1,501,500 2,000,000	63	1751	1999.71
	TOTALS	$ 15,422,300		8945	Mean 1724.13

*K-12 average daily membership (ADM) per pupil expenditures inclusive of both state and local funds were as follows: 1984-85: $2810, 1985-86: $2988; 1986-87: $2920; 1987-88: $2967; 1988-89: $3153 (Source: Bulletin 1472, Annual. Louisiana State Department of Education)

School systems were invited to compete for 1984-85 program funds through submission of proposals to the Department of Education. Ten grants of $30,000 each were awarded. Results of the first-year pilot projects were reported in the Interim Evaluation Report: 1984-85 Early Childhood Development Projects and the Interim Evaluation Report: 1985-86 Early Childhood Development Program prepared by the Bureau of Evaluation in April 1985 and April 1986, respectively. A complete list of the evaluation reports for 1984 through 1989 is provided in Appendix A.

Act 323 (La. R.S. 17:24.7) of the 1985 Legislature extended the initial pilot effort by authorizing annual funding of early childhood projects beginning with the 1985-86 school year. A copy of this statute is provided in Appendix B. Approximately $2.1 million was appropriated for 1985-86. All systems were eligible to apply for funding for up to four projects each, in accordance with a formula established by Act 323 based on school system enrollment. Thirty-seven of the 66 local school systems in the state participated during the 1985-86 school year, implementing a total of 50 early childhood classes.

Funding for the 1986-87 program was authorized by the 1986 Legislature in the amount of $1.8 million. All systems were eligible to apply for funds in accordance with total student enrollment levels. Fifty systems elected to participate during 1986-87, implementing a total of 71 classes statewide.

For the 1987-88 school year, budgetary constraints caused the funding to be limited to ongoing programs, with no new proposals being accepted. Consequently, program participation was limited to the 50 systems that had offered early childhood classes in 1986-87. A total of $1.7 million was made available for the continuation of these projects during the 1987-88 school year.

For 1988-89, the State Board of Elementary and Secondary Education, in support of the Governor's Education Reform Package, allocated funds to the Department of Education through the Louisiana Quality Education Support Fund 8(g) to expand the existing effort through the initiation of model programs for potential implementation in the 16 systems that had not previously participated. Funding for the newly termed 1988-89 State-Funded Program for High-Risk Four-Year-Olds was, therefore, from two sources: the state appropriation, in the amount of $1.5 million, plus $1.4 million in 8(g) funds. A total of $2.9 million was made available for the implementation of classes for at-risk four-year-olds in the 62 systems that elected to participate.

For 1989-90, the State-Funded Program for High-Risk Four-Year-Olds was again funded by both 8(g) and state funds. The Quality Education Support Fund 8(g) provided $1,595,000 in funds to support model programs, with the remaining $1,501,000 provided for ongoing programs by state appropriation. A total of $3,096,500 was thus made available for projects in the 62 systems participating in the program in 1989-90.

In 1990 the program was funded in the amount of $1,501,500 from state funds and $2,000,000 from the Quality Education Trust Fund (8(g)), totalling $3,501,500 for the 1990-91 school year. Sixty-three of the state's local education agencies (LEAs) chose to participate in the program and offered from one to four classes for the eligible preschool children.

Among other requirements related to implementation of the program for high-risk four-year-olds, Act 323 directs each participating school system to provide the Department of Education with a "thorough written review of the project including documentation of how the money awarded...was spent, its results, and the recommendations of the school system with regard to the project...." In addition to

these individual project evaluations required by statute, the Bureau of Evaluation and Analytical Services in the State Department of Education has been asked by the Bureau of Elementary Education (which is responsible for the administration of the State-Funded Program for High-Risk Four-Year-Olds) to continue its overall evaluation of the implementation and effectiveness of the program. The present report, Part I. Program Description, represents the results of the study of the 1990-91 program conducted in response to that request; additional parts of the evaluation report will be prepared during the spring and fall of 1991.

Purpose of the Evaluation

The purpose of this evaluation of the State-Funded Program for High-Risk Four-Year-Olds is to provide information to decision makers at the state and local levels to assist them in making judgements about the extent to which the intended goals of this early childhood education program in the public schools have been attained and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing the administrators of individual projects with information for use in decision-making about continuing, modifying, or developing projects for at-risk four-year-olds.

Evaluation Questions

For fiscal year 1991 the evaluation of the State-Funded Program for High-Risk Four-Year-Olds focuses on several major themes:

- An examination of the demographics associated with program participation and implementation
- A determination of the per pupil expenditure in local programs

- o An examination of the instructional techniques employed in local programs
- o An indication of the extent to which the program has met the needs of the total population of high-risk four-year-olds in Louisiana
- o An analysis of the longitudinal impact of program participation on former participants now in kindergarten through fifth grade

As previously noted, the 1990-91 evaluation of the State-Funded Program for High-Risk Four-Year-Olds will be reported in three parts. These three parts and the questions to be addressed in each are as follows:

Part I. Program Description Report

1. What are the characteristics of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?
2. What is the per pupil expenditure in local school system projects for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?
3. What proportion of high-risk four-year-old children of Louisiana are participating in the State-Funded Program for High-Risk Four-Year-Olds?

Part II. Follow-Up Study

1. What is the impact of the State-Funded Program for High-Risk Four-Year-Olds on the grade level progression of former participants?
2. What is the impact of the program on the classroom performance of former participants?

Part III. Classroom Observation Results and Comprehensive Evaluation Report

1. What instructional techniques and methodologies are in use in local programs for high-risk four-year-olds?
2. To what extent do classroom techniques and methodologies reflect the developmental philosophy inherent in early childhood education?
3. What is the impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in third through fifth grades as assessed by the Louisiana Educational Assessment Program?

Evaluation Audiences

The following are the major audiences for the evaluation and are considered legitimate recipients of evaluation reports:

- The State Department of Education Office of Academic Programs and Bureau of Elementary Education
- The State Superintendent of Education and his Cabinet
- The State Board of Elementary and Secondary Education
- Members of the State House of Representatives and Senate Education Committees
- Administrators of individual State-Funded Programs for High-Risk Four-Year-Olds

2

METHODOLOGY

Data Sources

The evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds will be both process and product oriented. Both qualitative and quantitative data will be collected to address the specific evaluation questions previously cited. Full references for the following major data sources for 1990-91 evaluation are provided in the Reference section of the present report:

La. R.S. 17:24.7

Annual evaluation reports for the State-Funded Program for High-Risk Four-Year-Olds, 1984-1989

Annual Louisiana Education Assessment Program (LEAP) reports of CRT and NRT test results, 1989-90

Regulations for the State-Funded Program for High-Risk Four-Year-Olds, July 25, 1988

Guidelines for the Application for State-Funded Programs for High-Risk Four-Year-Olds, 1989-90

CACI, Inc. The Sourcebook of County Demographics, current

Project Description Survey reports, annual

Follow-up Study reports, annual

Unpublished classroom observation reports and field notes

1986 Vital Statistics of Louisiana

Evaluation Procedures

The evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds began with the review of the data collection instruments by the Bureau of Evaluation and Analytical Services in consultation with the Bureau of Elementary Education. The Project Description Survey, the Follow-Up Study of Former Program Participants, and accompanying cover memo were mailed to all project directors on

August 14, 1990. The requested return date for the Project Description Survey to be completed by project directors was October 1, 1990. The follow-up forms were forwarded to the 1990-91 grades kindergarten through grade five teachers of former high-risk four-year-old program participants. The return date for these forms was December 15, 1990. Data obtained from the Project Description Survey are included in the present report.

In order to determine the total number of four-year-olds in Louisiana, and more specifically the percentage of this total considered to be at risk, several data sources were consulted. The figure reflecting the total number of four-year-olds was drawn from Louisiana Department of Health and Human Resources figures on Louisiana birth history from 1960 through 1986. The specific demographic information needed in order to compute the number of such children considered to be at risk was obtained from The Sourcebook of County Demographics by CACI, Inc. Both sources are discussed in more detail in the next section.

Description of the Instruments

The local program data used in the conduct of this study are primarily drawn from two instruments developed for the Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Olds: the Project Description Survey and the Follow-Up Study of former program participants. The Project Description Survey was developed specifically for this study by the Bureau of Evaluation and Analytical Services with the Bureau of Elementary Education. A copy of this instrument is provided in Appendix C. The Follow-Up Study instrument was adapted from the Anderson and Bower (1985) Statewide Evaluation Program for Handicapped Children in Louisiana: 1985-86 Questionnaire/Interview, Kindergarten Teachers. This instrument is used in obtaining grade placements of former

participants. A copy of the instrument is provided in Appendix D. The Project Description Survey is an instrument addressing the following ten areas: program location; participation level; class type and enrollment; staffing; participant selection criteria; family background of participants; instructional program description; parental involvement; participant transportation; and assessments of program strengths and weaknesses. The instrument was designed to be completed by each local project director relative to all classes for high-risk four-year-olds being conducted under the auspices of the state program.

The Follow-Up Study instrument identifies the seven areas basic to early childhood education and requested that the kindergarten through fifth grade teachers currently working with program graduates assess the performance of these students in comparison with that of their present classmates. The teachers were also asked to provide information on student retention, parental involvement, and/or student participation in developmental or transition classes.

The Louisiana Department of Health and Human Resources provides Louisiana birth history data from 1960 through 1986 by parish and state for that time period. Correlations between birth year and academic class group are also included, along with birth rates by race. Through the use of the birth rate for 1986, an estimation of the total number of four-year-olds in the state during 1990 was made.

The Sourcebook of County Demographics by CACI, Inc., provides an annual update of census information in three main areas: total population, demographic composition, and income distribution. Income profiles are provided by county and state in terms of the percentage of family incomes under $10,000, as well as for those within the following ranges: $10,000-$14,999, $15,000-$24,999, $25,000-$34,999, $35,000-$49,999, $50,000-74,999, and above $75,000. Since changes in income available to households relate closely to the local industrial and economic base, CACI

tracks local growth and decline of industry as related to income levels through economic base projections of the National Planning Association (NPA). NPA utilizes historic data on income by industry from the United States Bureau of Economic Analysis. CACI's income projections apply the NPA-projected rate of change in per capita income to household family income data from the 1980 census, thereby incorporating the potentially substantial local effects of a changing industrial base.

Data Analysis Procedures

The local project data compiled from the Project Description Survey responses are largely descriptive in nature and are aggregated for a statewide report. For those items where quantitative information was obtained, frequencies and percentages are reported as appropriate.

The Follow-Up Study instrument data are quantitative and are compiled in the form of frequencies and means for each of the seven developmental areas addressed. These results are reported by grade level in accordance with the current kindergarten through fifth grade enrollment of program graduates. Student grade-level placement information is reported as frequencies and percentages.

The birth rate data for 1986 were used to project the total number of four-year-olds in Louisiana during the 1990-91 school year. This number was then correlated with data from The Sourcebook of County Demographics to compute numbers and total percentages of high-risk four-year-olds theoretically in the state during 1990-91.

3

PRESENTATION OF THE DATA AND DISCUSSION OF THE FINDINGS

Introduction

The data for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description were collected by means of the Project Description Survey instrument. The instrument was sent to the LEA project coordinators in August of 1990, and completed forms were returned to the Bureau of Evaluation and Analytical Services by December 1990. The findings are organized and reported in the following paragraphs in response to the three evaluation questions addressed by the study.

Evaluation Question 1: What are the characteristics of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

During the 1990-91 school year, 63 of the state's 66 local education agencies (LEAs) participated in the State-Funded Program for High-Risk Four-Year-Olds. One LEA entered the program for the first time in 1990-91. Fifty LEAs have participated for five or more years. The distribution by years of participation is as follows: first year: 1 LEA, second year: 0; third year: 12; fourth year: 0; fifth year: 12, sixth year: 29; and seventh year: 9. Since no new programs had been funded in 1987-88, there are no LEA fourth-year projects in 1990-91.

In 1990-91 there is a total of 90 classes, an increase of six classes from the previous year. La. R.S. 17:24.7 provides the following eligibility schedule based upon LEA enrollment the immediately preceding school year: 19,999 or less: 1 class; 20,000-39,999: 2 classes; 40,000-59,999: 3 classes; 60,000 or more: 4 classes. When maximum numbers of classes, in all of the LEAs that choose to participate in the program have been funded, and when certain other circumstances exist, an LEA may

be granted approval for one or more additional classes. Information about the procedures is available from the Early Childhood Education Section, Bureau of Elementary Education, telephone (304)342-3366.

By numbers of classes offered by the LEAs in 1990-91, the distribution of the 90 classes is as follows:

4 classes: 3 LEAs (unchanged from 1989-90)

3 classes: 1 LEA (unchanged from 1989-90)

2 classes: 16 LEAs (increased by 4 from 1989-90)

1 class: 43 LEAs (decreased by 3 from 1989-90)

Class type and enrollment. At its regular meeting on July 25, 1988, the State Board of Elementary and Secondary Education (BESE) adopted "Regulations for State-Funded Programs for High-Risk Four-Year-Olds." Allowable pupil to adult ratios are set at 10 to 12 pupils with one teacher and one half-time aide; and/or 16 to 20 students with both a teacher and full-time aide. Currently, all classes have a full-time aide. Therefore, a class with an enrollment of less than 16 children would be in violation of the state regulations.

Class types by length of the class day and enrollment levels in 1990-91 are reported in Table 2. It is shown that 90 classes served 1751 high-risk four-year-old children. Five of these classes are half-day, and 85 are full-day. The October 1990 mean enrollment in full-day classes was 19.5. Most (75.6%) of the classes enroll 20, the maximum permissible enrollment for the one-teacher and one-aide classes. The 1659 children enrolled in full-day classes make up 94.7 percent of the 1751 in the program in 1990-91. As of December 1, 1990, all LEAs with full-day classes had reported enrollments of from 16 to 20 eligible children.

Enrollments in the five half-day classes are either 16 (N=2) or 20 (N=3). The mean half-day class size is 18.40. The 92 children in the half-day classes make up 5.26 percent of the total 1990-91 enrollment in the program.

Table 2. Full-day and Half-day Enrollments in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

	FULL-DAY				HALF-DAY			
CLASS SIZE	CLASSES		STUDENTS		CLASSES		STUDENTS	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
15*	1	1.1	15	0.9				
16					2	40.0	32	34.8
17	7	8.3	119	7.2				
18	2	2.4	36	2.2				
19	11	12.9	209	12.5				
20	64	75.3	1280	77.2	3	60.0	60	65.2
TOTALS	85	100.0	1659	100.0	5	100.0	92	100.0

* As of December 1, 1990, the reported enrollment for this class is 17.

Program staffing. Table 3 shows the numbers and proportions of the 88 teachers in the program by certification status. As of March 1, 1991, seventy-eight (88.6%) have either Nursery School or Kindergarten Certification, as compared with 71 (81%) in these two categories in 1989-90.

Table 3. Qualifications of Teachers in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

	TEACHERS	
TEACHER CERTIFICATION	NUMBER	PERCENT
Nursery school (N)	43	49
Kindergarten (K)	34	38
Elementary (Not N or K)	0	0
Other* (Not Elem., N or K)	1	1
Special condition		
Circular 665 Temporary Emergency Permit	5	6
Provisional Emergency Temporary Certificate	5	6
TOTAL	88	100%

* This teacher was replaced by a certificated nursery school teacher as of March 1, 1991.

Selection of participants. In keeping with "Regulations for State-Funded Programs for High-Risk Four-Year-Olds," participant eligibility criteria specify that participants must be:

One (1) year younger than the age required for kindergarten

At-risk of being insufficiently ready for the regular school program based on screening results

From families with annual incomes under $15,000

From families who agree to participate in various activities associated with the program

Table 4(a) shows the frequency with which the participating LEAs employed each of these mandated criteria, as well as other criteria, in the identification of high-risk children. All of the 63 LEAs (100%) used the age criterion, screening results, and the family income criterion in the selection of participants. All (100%) are in compliance with the family agreement to participate criterion, and 40 (63.5%) used parent interviews as a part of the participant selection process.

Some LEAs used eligibility for other programs as criteria : 28 (44.4%) used free lunch eligibility , 19 (30.2%) used Chapter 1 eligibility, and 11 (17.5%) used Head Start eligibility. Seven LEAs (11.1%) used other criteria.

Table 4(a). Selection of Students for Participation in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

LOCAL SCHOOL SYSTEMS USING EACH CRITERION		
SELECTION CRITERIA	NUMBER OF SYSTEMS	PERCENT
One year younger than kindergarten age	63	100.0
Identified as at-risk on screening results	63	100.0
From families who agree to participate	63	100.0
From families with annual incomes under $15,000	63	100.0
Parent interviews	40	63.5
Free lunch eligibility	28	44.4
Chapter 1 eligible family	19	30.2
Head Start waiting list	11	17.5
Other	7	11.1

State regulations authorize LEAs to select screening instruments from a state-approved list of instruments designed for preschool use. All of the 63 participating LEAs used one or more of these instruments in the selection of eligible participants. In order of decreasing frequency of use, Table 4(b) lists the approved instruments:

the Brigance Pre-School Screen for Three and Four-Year-Old Children, the Developmental Indicators for the Assessment of Learning (DIAL-R), the Denver Developmental Screening Test, the Battelle Developmental Inventory, and the Early Recognition Inventory System (ERIS).

Table 4(b) also shows that all except one of the ratings of the chosen screening instruments were "very effective". However, there were four instances when no rating was provided. Of the 34 LEAs (53.9%) that used the Brigance Screen, 12 (35.3%) rated it very effective, and 22 (64.7%) rated it effective. Eleven of the LEAs selected the DIAL-R screen. Rating results indicated eight (72.7%) were very effective and two (18.2%) were effective; one (9.1%) did not report a rating. Three (30.0%) of the 10 LEAs that chose the Denver Screen rated it very effective; four (40.0%) rated it effective, and one (10%) rated it ineffective. Two (20.0%) of the LEAs that used the Denver Screen did not provide a rating. Of the seven LEAs (11.1%) that used the Battelle Screen, three (42.9%) rated it very effective; three (42.9%) rated it effective; and one (14.2%) did not provide a rating. Two LEAs (3.2%) chose the ERIS; one (50.0%) rated it very effective, and one (50.0%) rated it effective. Two LEAs (3.2%) reported using other screens; one found its choice very effective, and the other found its choice effective. In sum, it appears that the LEAs are satisfied with their chosen screening instruments.

Table 4(b). Effectiveness Ratings of Screening Instruments Used for Selection of High-Risk Four-Year-Old Program Participants, 1990-91

SCREENING INSTRUMENT	EFFECTIVENESS RATING									
	VERY EFFECTIVE		EFFECTIVE		INEFFECTIVE		NO RATING		TOTAL LEAS	
	No.	%	No.	%	No.	%	No.	%	No.	%
Brigance Pre-School Screen for Three and Four-Year-Old Children	12	35.3	22	64.7	0	0	0	0	34	54.0
Developmental Indicators for the Assessment of Learning (DIAL-R)	8	72.7	2	18.2	0	0	1	9.1	11	17.5
Denver Developmental Screening Test	3	30.0	4	40.0	1	10.0	2	20.0	10	15.9
Battelle Developmental Inventory	3	42.9	3	42.9	0	0	1	14.3	7	11.1
Early Recognition Intervention System (ERIS)	1	50.0	1	50.0	0	0	0	0	2	3.2
Other, Not on Approved List	1	50.0	1	50.0	0	0	0	0	2	3.2

* Some systems used more than one screening instrument; all use at least one state-approved screening instrument.

Family background. The Project Description Survey instrument includes four items on family background: family structure (two-parent or other), race/ethnic status, income, and principal wage-earner occupation. Table 5 reports the family background findings.

Only approximately one-third (N=666, 38.0%) of the children participating in the State-Funded Program for High-Risk Four-Year-Olds come from families where the child lives with both his or her father and mother.

Racial/ethnic background. Table 5 shows that nearly all (98.4%) of the participants are either Black or White. Since the first year of the program, the proportions have been roughly two-thirds Black and one-third White: 66 to 32 in 1985-86, 65 to 34 in 1986-87, 66 to 33 in 1987-88, 70 to 29 in 1988-89, 71 to 28 in 1989-90, and 69 to 30 in 1990-91. For the most recent five years (since 1986-87), approximately one percent of the participants have been other than Black or White.

Family income. In 1990-91, all of the participating school systems (100%) have selected children who meet the criterion of membership in a household with an annual income of under $15,000. Table 5 shows that 72.3% of the children come from homes with annual incomes under $10,000 and 26.6% from homes with incomes of $10,000 to $14,999. For the remainder of children, the family incomes were reported to be under $15,000; no figure for those with incomes under $10,000 was provided for these families.

Occupation. Five categories are provided on the survey instrument to report the occupations of the principal wage earners of the families of the children in the State-Funded Program for High-Risk Four-Year-Olds. Table 5 shows that approximately 50% of the heads of households of participating children are employed, and 45% are not. No information is available for the remaining five percent (N=85).

Slightly more than one-third (N=609, 34.8%) of the principal wage earners in the families of all of the participating children are unskilled laborers. Of the employed principal wage earners for whom information is available, the proportion of unskilled laborers exceeds two-thirds (69.5%). The remaining distributions for the households of all of the children are: 222 (12.6%) skilled laborers, 23(1.3%) technical or professional, and 22(1.3%) managerial or administrative.

Table 5. Family Backgrounds of Student Participants in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

FAMILY BACKGROUND CHARACTERISTICS	STUDENTS	
	NUMBER	PERCENT
Race (Rank order by frequency)		
Black	1198	68.4
White	524	29.9
Hispanic	10	0.6
Asian	4	0.2
No response	5	0.3
Native American	5	0.3
Other	1	0.1
TOTAL	1751	100.0
Family Income		
Under $10,000	1266	72.3
$10,000 - 14,999	466	26.6
Under $15,000 (Excluding those for whom under $10,000 or $10,000 - 14,999 figures were under $15,000 reported)	19	1.1
TOTAL	1751	100.0
Principal Wage-Earner Employment (Rank order by frequency)		
Unemployed	788	45.0
Unskilled labor	609	34.8
Skilled labor	222	12.6
Professional/technical	23	1.3
Manager/administrator	22	1.3
Not reported	87	5.0
TOTAL	1751	100.0
Intact Family	666	38.0

Pupil progress assessment. All of the 63 LEAs that are participating in the 1990-91 State-Funded Program for High-Risk Four-Year-Olds used a pre-test and post-test to assess pupil progress. Nearly all of the LEAs use parent/teacher conferences (96.8%) and teacher observation (98.4%) in assessing pupil progress. Another frequently-used mode of assessment is the skills checklist; 13 LEAs (20.6%) use commercially developed lists and 35 (55.6%) use local teacher-developed lists. Eight LEAs (12.7%) use other ways of assessing pupil progress.

Table 6(b) shows that no LEA expressed dissatisfaction with its chosen assessment instrument. Twenty-five (39.7%) rated the assessment instrument very effective and 30 (47.6%) rated their choice effective. Eight LEAs (12.7%) did not provide a rating.

Table 6(a). Means Used by Teachers to Assess the Progress of the Children in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

ASSESSMENT MEANS (Rank order by frequency)	SCHOOL SYSTEMS*	
	NUMBER	PERCENT
Teacher observation	62	98.4
Parent teacher conference	61	96.8
Pre-test and post-test	63	100.0
Skills checklist		
Local, teacher-developed	35	55.6
Commercially-developed	13	20.6
Other	8	12.7

* A school system may use more than one of the means of student assessment.

Table 6(b). Effectiveness Ratings of the Pre-Tests and Post-Tests Used to Assess the Progress of the Children in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

EFFECTIVENESS RATING	SCHOOL SYSTEMS	
	NUMBER	PERCENT
Very effective	25	39.7
Effective	30	47.6
Ineffective	0	0.0
Very ineffective	0	0.0
No rating or not applicable	8	12.7
TOTALS	63	100.0

Parental involvement. Table 7 shows that the most used modes of parental involvement are participation in meetings and workshops and helping with social activities for the children; 61 LEAs (96.8%) report using each of these. From most to least used, the other modes used to involve parents are: helping with field trips (88.9%), bringing snacks (73.0%), making materials and helping with art projects (60.3% each), reading stories (54.0%), helping on the playground (33.3%) and in the cafeteria (30.2%), helping in other ways (25.4%), and taking children to the library (12.7%).

Table 7. Parental Involvement in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

PARENTAL INVOLVEMENT ACTIVITIES	SCHOOL SYSTEMS*	
	NUMBER	PERCENT
Attendance at meetings/workshops	61	96.8
Helping with parties	61	96.8
Helping with field trips	56	88.9
Bringing snacks	46	73.0
Making materials	38	60.3
Helping with art projects	38	60.3
Reading stories to the children	34	54.0
Helping on the playground	21	33.3
Helping in the cafeteria	19	30.2
Helping in other ways	16	25.4
Taking children to the library	8	12.7

* School systems generally use more than one kind of parental activity.

Transportation. It can be seen from Table 8(a) that 38 (60.3%) of the LEAs provide transportation for all of the children, both to and from school; two (3.2%) provide transportation only one way. In ten (15.9%) of the LEAs, transportation is provided by the LEA only for those children on the established bus routes. In 14 LEAs (22.2%) parents are responsible for providing round-trip transportation for their children.

Table 8(b) reports LEA assessments of the scope of transportation needs. One LEA indicates that about one-half of the eligible participants still have access, and one reports that fewer than half are able to participate. Three LEAs (11.5% of the 26 that do not provide round-trip transportation) find that transportation policies make the program inaccessible to those most in need.

Table 8(a). Transportation of the Children in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

TRANSPORTATION PROVISIONS (Rank order by frequency)	SCHOOL SYSTEM	
	NUMBER	PERCENT
School system provides, two-way	38	60.3
Parents responsible, two-way	14	23.8
School system provides within regular bus routes only	10	15.9
School system provides, one-way	2	3.2

Table 8(b). Accessibility of Schools to Children Eligible for Participation in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

TRANSPORTATION PROVISIONS (Rank order by frequency)	SCHOOL SYSTEM	
	NUMBER	PERCENT*
Majority have access	21	80.8
The program is not accessible to those most in need	3	11.5
About half have access	1	3.8
Fewer than half have access	1	3.8
TOTAL	26	100.0

* Percentages of the 26 school systems that do not provide round-trip transportation for all of the participants

Program assessment. Table 9(a) shows that, in response to nine listed strengths and an open-ended "other" item, the most frequently-cited strength is "program quality, especially the developmental aspects"; 59 (93.7%) of the LEAs cited this strength. In order of the relative frequencies with which the items were cited, the strengths are: administrative support and quality of the teachers and aides (N=58 each; 92.1% each), early identification and assistance to high-risk children (N=54, 85.7%), parental involvement and participation (N=46, 70.3%), community support (N=41, 65.1%), health and medical services (N=34, 50.0%), and quality of facilities (N=32, 50.8%). Six LEAs (9.5%) noted other strengths; two (3.2%) did not provide responses to this item.

Table 9(b) shows that, in response to ten listed weaknesses and an open-ended "other" item, the most frequently-cited weakness is the limitation associated with late and/or insufficient funding; 37 (58.7%) of the LEAs cited this item. In order of the relative frequencies with which the items were cited, the more frequently-cited weaknesses are: limitations set by the regulation on income level

(N=35, 55.6%), limited numbers of parents involved (N=22, 34.9%), and limited parental involvement in instructional areas and limited facilities or equipment (N=19 each, 30.2% each). Less frequently cited, but perhaps of critical importance for the LEAs involved are: lack of health services (N=7, 11.1%), lack of properly-certified teachers (N=6, 9.5%), and weaknesses in certain developmental areas (N=4, 6.3%). Seven LEAs (11.1%) identified other weaknesses. It is noteworthy that no LEA reported limited administrative support for the program.

Table 9(a). Strengths of the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

PROGRAM STRENGTHS	SCHOOL SYSTEMS*	
(Rank order by frequency)	NUMBER	PERCENT
Program quality, especially the developmental aspects	59	93.7
Support by the administration and faculty	58	92.1
Quality of teachers and aides	58	92.1
Early identification and assistance for at-risk children	54	85.7
Parental involvement and participation	46	73.0
Community support	41	65.1
Health and medical services	34	54.0
Quality of facilities	32	50.8
Other	6	9.5
No Response	2	3.2

* Generally, the school systems identified more than one strength.

Table 9(b). Weaknesses of the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

PROGRAM WEAKNESSES	SCHOOL SYSTEMS*	
(Rank order by frequency)	NUMBER	PERCENT
Limitations associated with late and/or insufficient funding	37	58.7
Limitations set by the regulation on income level	35	55.6
Limited number of participating parents	22	34.9
Limited parental participation in instructional areas	19	30.2
Limited facilities or equipment	19	30.2
Lack of health services	7	11.1
Other	7	11.1
Lack of properly certified teachers	6	9.5
Weaknesses in specific developmental areas	4	6.3
Lack of staff development in developmentally-appropriate techniques	3	4.8
Limited administrative support	0	0.0

* Generally, the school systems identified more than one weakness.

Evaluation Question 2: What is the per pupil expenditure in local school system projects for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

Introduction. Total state and Quality Education Trust Fund 8(g) funding for implementation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds is $3,501,000. The funding allocated to the LEAs varies with the type of class (half-day or full-day), with the numbers of pupils and teachers, and with teacher salaries.

As previously noted, the number of classes for which an LEA is eligible depends upon the local school system enrollment the previous year. Table 10 shows that in the 1990-91 school year, most (N=59) of the 63 participating school systems had either one or two classes in the program: 43 (68%) had 1, 16 (25%) had 2, 1 (2%) had 3, and 3 (5%) had 4.

Per pupil cost*. Per pupil costs are calculated for both the half-day and the full-day classes; the results are shown in Table 10. The approximate cost for the half-day students is based upon the results of dividing the total funds allocated to half-day classes ($89,916) by the total number of students in half-day classes (N=92). The resulting estimate of average per pupil cost for half-day students is $977. Performing the same computation for full-day students, one finds 1659 students are enrolled in full-day classes funded in the amount of $3,411,584. The resulting full-day average per pupil cost estimate is $2056. These figures compare favorably with the average per pupil cost for grades K-12, which is shown in the Annual Financial and Statistical Report, Bulletin 1472, for 1988-89 to be $3153. It should be noted that the Bulletin 1472 figure includes both state and local allocations for the regular school operations and facilities. The allocations for the program for high-risk four-year-olds are much more limited in scope.

Per pupil contact-hour cost*. For purposes of analysis, half-day classes are here defined as those that provide three hours of student-teacher contact per school day. Correspondingly, full-day projects provide six hours of instruction per day. The school year consists of 180 school days. These standard units of measure are used to determine that the half-day class provides 540 contact-hours a year, and the full-day class provides 1080 contact hours a school-year. The mean per pupil contact hour cost for full-day classes was thus found to be $2.07.

*Only State General Funds and 8(g) funds allocated for the State-Funded Program for High-Risk Four-Year-Olds are included in the present report. Other sources of funds and/or in-kind services may be provided by some LEAs to augment their projects. Consequently, comparisons among the LEAs with respect to total project funding are beyond the scope of the present study.

Analyses show that 49,680 pupil contact hours were provided through half-day classes, and 1,791,720 pupil contact hours were provided through full-day classes. The per pupil contact-hour cost for the half-day classes was thus found to be $1.81. In view of the very small proportion of LEAs that continue to offer half-day classes, the composite half-day/full-day class cost per pupil contact hour is $1.90. This information is summarized in Table 10.

Table 10. Project Funding Rates for the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

Number of Classes	Number of LEAs	Percentage of Participating LEAs
1	43	68
2	16	25
3	1	2
4	3	5
TOTALS	63	100%

Class Type	Per Pupil Cost
Half-day	$ 977.35
Full-day	$2,056.41
Average	$1,999.71

Class Type	Cost Per Pupil Contact Hour
Half-day (540)	$ 1.81
Full-day (1,080)	$ 1.90
Average	$ 1.90

Question 3. What proportion of Louisiana's high-risk four-year-old children are participating in the State-Funded Program for High-Risk Four-Year-Olds?

Question three is addressed by computation of a Service-to-Eligibility Ratio. Projections of the total number of high-risk four-year-old children in the state in 1990-91, as well as those relative to the number of eligible children served in several programs designed to prepare preschool children for success in school, are examined.

Eligibility projections. Eligibility projections are used to estimate the magnitude of the task of providing services to all of the high-risk four-year-old children in the state in order to promote readiness for first grade. Only the criterion of coming from a household with annual earnings of under $15,000 is used in the eligibility determination for this computation.

Estimates of the total population of four-year-olds in Louisiana during the 1990-91 school year were obtained from 1986 parish level birth rate data contained in the 1986 Vital Statistics of Louisiana report on birth rate history. As illustrated in the Table 11, a total of 77,944 live births were recorded in Louisiana during 1986; these are the children that formed the 1990 pool of four-year-olds.

Based on the documented relationship between family income levels and the degree of school readiness exhibited by children within those families, parish and state income-level data were used to determine the number and percentage of high-risk children within the state's total four-year-old population in Louisiana. Income projections are from The Sourcebook of County Demographics by CACI, Inc. In addition to the traditional use of $9,999 as the base poverty-level family income, the children of families within the $10,000-$14,999 range were also viewed as at risk. The number of high-risk four-year-olds in Louisiana during the current 1990-91

944). Table 11 shows that the projected proportion of families with 1990 incomes below the $15,000 level was 32.9 percent (N=25,643).

The CACI sourcebook projects that 22.7 percent of the 1990 four-year-old population (77,944) were in households having annual incomes under $10,000; this represents 17,693 high-risk four-year-olds. The percentage of such children in households whose family incomes range from $10,000 to $14,999 was projected to be 10.2 percent.

Table 11. Projections of the Total Number of High-Risk Four-Year-Old Children Potentially Eligible for Participation in the State-Funded Program for High-Risk Four-Year-Olds, 1990-91

Total Live Births in Louisiana in 1986[2]	Projected Distribution of 1990 Households by Incomes Under $15,000[1]					
	Under $10,000		$10,000-$14,999		Total Under $15,000	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
77,944	17,693	22.7	7,950	10.2	25,643	32.9

[1]1986 Vital Statistics
[2]CACI, Inc. The Sourcebook of County Demographics

Service-to-Eligibility. Based on the projected 25,643 high-risk four-year-old children in Louisiana in 1990-91, the 1751 children served by the State-Funded Program for High-Risk Four-Year-Olds constitute 6.8 percent of the total pool of children in need of assistance to ensure that they will achieve success in school. Table 12 shows the proportions served by the several programs designed to assist these children during 1990-91, as well as those for the two immediately previous years. Figure 1 is a graphic representation of the distributions of children served by the program in 1990-91.

Table 12. Service-to-Eligibility Ratio for High-Risk Four-Year-Old Children in Louisiana, 1988-89 through 1990-91

	1988-89		1989-90		1990-91	
	NUMBER	PERCENT	NUMBER	PERCENT	NUMBER	PERCENT
Louisiana Four-Year-Old Children	81,476	100.0		100.0	77,944	100.0
Total Eligible (Annual Household Income Under $15,000)	28,190	34.6	28,162	34.6	25,643	32.9
Head Start[1]	7,859	27.8	7,536	26.8	10,645	41.5
ESEA Chapter 1	3,000[2]	10.6	1,032	14.3	4,264	16.6
Special Education[2]			2,242	8.0	2,065	8.1
State-Funded Program for High-Risk Four-Year-Olds	1,614	5.7	1,658	5.9	1,751	6.8
Other Programs[3] (Estimated)			100	0.4	103	0.4
Total Eligible Children Not Served by a Program	15,717	55.8	12,599	44.7	6,815	26.6
Eligibility: Service Ratio (Total Served/Total Eligible)	12,473	44.2	15,563	55.3	18,828	73.4

1 It should be noted that the Head Start figures currently available from the regional office in Dallas are approximations which fluctuate as new information comes in and as analyses are refined. It may be that changing policy relating to the admission of three-year-old children in certain Head Start Programs, suggest greater progress than is the case for delivery of appropriate services to the high-risk four-year-old children.

2 ESEA Chapter 1 staff estimate

3 "Special Education" and "Other Programs" were not included in the report for 1988-89.

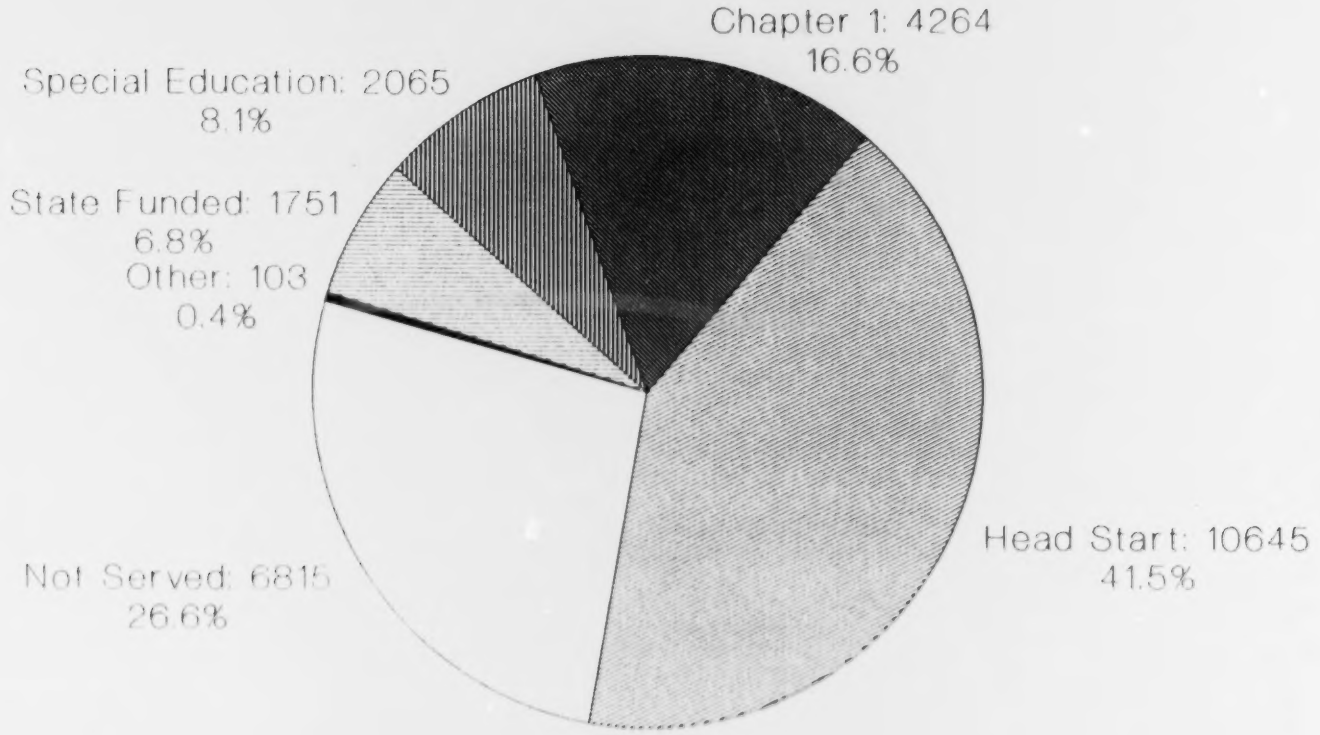

Figure 1. Number and Percent of High-Risk Four-Year-Olds Served During the 1990-91 School Year (N=25,643)

The federally-funded Head Start Program[1], the largest of the pertinent programs, serves 10,645 children or 41.5 percent of the identified pool of eligible children. Table 12 and Figure 1 show that, among the other school readiness programs, ESEA, Chapter 1 serves 4,264 (16.6%); Special Education, 2,065 (8.1%); and "other programs" serve an estimated 103 (0.4%). Combining the numbers served by the various programs shows that 18,826 of the 25,643 children designated as high-risk are being served in 1990-91. Dividing the total number of four-year-old children served through the programs for at-risk preschool children by the total number of children in need of such services yields a Service-to-Eligibility Ratio of 73.4. Stated another way, 73.4 percent (N=18,828) of the eligible children are being served by a program, and 26.6 percent (N=6815) are not in any of the programs.

Comparison of 1990-91 findings with those of the two immediately preceding years, shows changes in the Service-to-Eligibility Ratio from 44.2 in 1988-89, to 55.3 in 1989-90, to 73.4 for 1990-91. Over these three years the percentages not receiving the needed services have been reduced from over half in 1988-89 (55.8%), to only a little over one-fourth for 1990-91 (26.6%).

For the three years treated in Table 12, it can be seen that the total number of four-year-olds in Louisiana has declined by approximately 3500, and that the projected proportion from households with incomes under $15,000 declined from 34.6 percent to 32.9 percent. The improved Service-to-Eligibility Ratio is largely attributable to a large increase in the number of Head Start programs that are now available to serve 41.5 percent (N=10,645) of the eligible children. In 1989-90, Head Start served 26.8 percent (N=7536).

---

[1]It should be noted that the Head Start figures currently available from the regional office in Dallas are approximations which fluctuate as new information comes in and as analyses are refined. It may be that changing policy relating to the admission of three-year-old children in certain Head Start Programs, suggest greater progress than is the case for delivery of appropriate services to the high-risk four-year-old children.

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SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of the State-Funded Program for High-Risk Four-Year-Olds is to improve the readiness of eligible children for success in school. Table 1 (page 1) shows the annual growth of the program in the numbers of local school systems offering the program, the numbers of classes, the numbers of children served, and the amounts of funding. During the past year the proportion of high-risk four-year-old children served by a readiness program increased from 55.3% (N=15,563) to 73.4% (N=18,828). Most of the past year's gain is attributable to expansion of the Head Start Program. Figure 1 (page 36) shows the proportions of children served by Head Start, ESEA Chapter 1, the Special Education Preschool Screening Program, the State-Funded Program for High-Risk Four-Year-Olds, and other programs.

The following paragraphs will summarize the findings and conclusions relating to each of the evaluation questions addressed. It is recommended that the Bureau of Elementary and Secondary Education consider the five recommendations in the continuing effort to maintain and to improve the quality of the program. Follow-up study and classroom observation results for the 1990-91 evaluation of the State-Funded Program for High-Risk Four-Year-Olds will be reported as parts two and three of the study. Comprehensive Longitudinal Report results will be provided in part four.

Question 1: What are the characteristics of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

Program access. Participating LEA reports indicate that the program meets a recognized need. The number of local education agencies (LEAs) that have chosen to participate has increased from 10 in 1984-85 to 63 of the 66 LEAs in 1990-91. By numbers of years participation, the distribution is as follows: 1 LEA one year, 12 LEAs three years, 12 LEAs five years, 29 LEAs six years, and 9 LEAs seven years.

The number of participating children has increased from 315 in 1984-85 to 1751 in 1990-91; a cumulative total of 8933 have participated since the inception of the program in 1984. Funding has increased from $300,000 in 1984-85 to $3,501,500 in 1990-91.

The program is, in the view of participating LEA staff members, in keeping with recognized principles of effective preschool education. The questionnaire respondents for the State-Funded Program for High-Risk Four-Year-Olds survey rated the program itself as the primary strength of the services provided. The developmental approach is identified as a major factor in program effectiveness. The developmental approach has characteristics defined by the classroom observation instrument (Adapted Early Childhood Environmental Rating Scale, by permission of authors Harms, T. and Clifford, R.M., Teachers College, Columbia University).

Most of the LEAs have chosen to offer full-day classes (85 of the 90 classes). Most of the classes have the maximum permissible enrollments, from 15 to 20 children; Table 2 (page 13) shows the distributions. Currently, all participating LEAs have a full-time teacher and a full-time teacher aide, or the equivalent.

Although the program appears to meet a recognized need and the program operates in keeping with recognized principles of effective preschool education, all eligible children do not have access to this or any other preschool program designed to increase their readiness for school. Figure 1 shows the proportions of eligible four-year-old children currently being served in several programs: Head Start[1]: 41.5 percent, ESEA, Chapter 1: 16.5 percent; the Special Education Screening Program: 8.1 percent; the State-Funded Program for High-Risk Four-Year-Olds: 6.8 percent; and Other Programs: 0.4 percent. It can be seen that over one-fourth

[1]It should be noted that the Head Start figures currently available from the regional office in Dallas are approximations which fluctuate as new information comes in and as analyses are refined. It may be that changing policy relating to the admission of three-year-old children in certain Head Start Programs, suggest greater progress than is the case for delivery of appropriate services to the high-risk four-year-old children.

(26.6 %) of children who could benefit from such a program are currently excluded due to reasons such as lack of funds, qualified staff and/or space. Some lack access because transportation is not available.

Transportation, to ensure that eligible children have access to the preschool readiness program, remains a problem at some sites. There are four strategies in operation: (1) school provides round-trip, (2) parents responsible for round-trip, (3) school provides on regular routes only, and/or (4) school provides one-way. Although most (77.8%) are believed to have access, three LEAs (11.1%) believe those who are most in need do not have access, and two other LEAs indicate an access problem by one-half or fewer-than half of the eligible children in their school systems.

Participant selection. The Project Description Survey, the major source of information collected to address question 1, includes four items on family background. The ethnic/racial make-up of program participants is approximately two-thirds Black and one-third White. There are very few members of other ethnic/racial groups.

All of the participating children are from homes with incomes under $15,000 per year. Approximately, three-fourths are from homes with incomes of under $10,000 per year. Some LEAs did not report the "under $10,000" and "under $15,000" data separately. All of the participating LEAs are in compliance with pupil selection criteria provisions, including the criteria for age, screening test results, family income, and parental agreement to participate. Some LEAs use additional criteria, such as eligibility for Chapter 1, Head Start, and/or free lunch.

The LEAs expressed satisfaction with their choice, from a state-approved list, of screening instruments. In assessment of pupil progress, nearly all (97-98%) of the teachers use observation and parent/teacher conferences. Pre-test/post-test instruments were used in all (100%) of the classes.

Teacher certification. During the 1990-91 school year, 77 of the 88 teachers in the program held Nursery (N) or Kindergarten (K) Teaching Certificates. The others fulfill the Temporary Certificate or Circular 665 provisions for state approval.

Parent participation. Parental involvement is an integral part of the State-Funded Program for High-Risk Four-Year-Olds. Over one-half of the LEAs involve parents in workshops and meetings, social activities for the children, and field trips. About one-fourth of the LEAs engage parents in making materials, helping with art projects, reading to the children, and helping the children in the cafeteria. Others use a variety of other parental involvement activities.

Program strengths identified by over one-half of the LEAs are: (1) strengths of the developmental approach, (2) administrative and staff support, (3) quality of teachers and aides, and (4) early intervention. Traits generally recognized in the literature of the field, but cited less frequently by the LEAs, suggest focal points for continuing program improvement: (1) parent involvement, (2) community support, (3) health and medical services, and (4) quality of facilities.

Most frequently-cited weaknesses were predominantly fiscal, management, and articulation problems in the forms of: (1) late and/or insufficient funding, and (2) the eligibility criterion on family income. The weakness citations re-enforce the need to work to improve parental involvement. Over one-third (34.9%) of the participating LEAs expressed concern that more parents do not involve themselves in the project activities, and nearly one-third (30.2%) cite the need for more

participation in instructional areas. Some weaknesses cited suggest a need to target and coordinate delivery of resources and services, e.g., to improve health and to improve transportation services.

Recommendation 1

It is recommended that the State -Funded Program for High-Risk Four-Year-Olds be expanded to increase the accessibility to eligible children not now served.

Recommendation 2

It is recommended that the Annual State Conference for the State-Funded Program for High-Risk Four-Year-Olds staff continue to provide a training session for project staff members, with particular attention to improvement of the accuracy, timeliness, and completeness of reports submitted by the local education agencies.

Recommendation 3

It is recommended that a training session on the components of an effective parental involvement program be provided for project staff members.

Recommendation 4

It is recommended that a study be conducted and that recommendations be made to the State Board of Elementary and Secondary Education on the basis of the relative merits of using a fixed amount versus sliding scales for the family income criterion for eligibility.

Recommendation 5

It is recommended that Bureau of Elementary and Secondary Education staff continue to be encouraged to coordinate services (e.g., transportation and health services) and to avail themselves of interagency coordination opportunities.

Question 2: What is the per pupil expenditure in local school system projects for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

Table 10 shows the per pupil allocations for half-day and full-day classes. There are 92 children in half-day classes in 1990-91; the total allocation for these classes is $89,916. Per pupil, the average half-day class allocation is $977. For the 1659 children in full-day classes, the total allocation is $3,411,584. The full-day average per pupil cost is shown to be $2056. Although differences in the data bases prelude precise comparison, generally these figures compare favorably with per pupil costs for students in grades K-12. The most recent available figures (1988-89) show the K-12 average was $3153 (Bulletin 1472, 1988-89).

Using three hours per day and 180 school days per year, there are 540 contact hours per year for children in half-day classes. Full-day classes are correspondingly defined as consisting of six hours per day for 180 school days per year. Based on these figures, there are 1,080 contact hours per student in full-day classes. Table 10 shows the per pupil contact hour allocation is $1.90. Because of the small proportion of children enrolled in half-day classes, the composite full-day and half-day allocation is also found to be $1.90.

Recommendation

The 1990-91 findings in response to Question 2 do not suggest a need for recommendations regarding per pupil expenditures by the local projects.

Question 3: What proportion of Louisiana's high-risk four-year-old children are participating in the State-Funded Program for High-Risk Four-Year-Olds?

Table 11 shows the number of live births in Louisiana in 1986 was 77,944. These children were four years old in 1990. Approximately one-third (32.9%, N=25,643) are from families with incomes under $15,000. Computation shows that the 1751 children served by the State-Funded Program for High-Risk Four-Year-Olds in 1990-91 constitute 6.8% of these eligible to participate in the program with respect to the income criterion.

Table 12 and Figure 1 show findings on the proportions of eligible children served by the State-Funded Program for High-Risk Four-Year-Olds and by other programs designed for high-risk preschool children. Dividing the number of eligible children (25,643) into the total number of children served by a program (18,828) yields a Service-to-Eligibility Ratio of 73.4. This figure is a marked improvement over 1989-90 when the ratio was 55.3.

Recommendation

The 1990-91 findings in response to Question 3 point up the previously stated recommendation to make the program accessible to all eligible children (Question 1, Recommendation 1).

Summary of Recommendations

The 1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description recommendations are that the Bureau of Elementary and Secondary Education consider the following items in the continuing effort to maintain and to improve the quality of the program:

1. that the program be expanded to increase accessibility to eligible children not now served

2. that the Annual State Conference for the State-Funded Program for High-Risk Four-Year-Olds staff continue to provide a training session for project staff members, with particular attention to improvement of the accuracy, timeliness, and completeness of reports submitted by the local education agencies

3. that a training session on the components of an effective parental involvement program be provided for project staff members

4. that a study be conducted and that recommendations be made to the State Board of Elementary and Secondary Education on the basis of the relative merits of using a fixed amount or sliding scales for the family income criterion for eligibility

5. that staff continue to be encouraged to coordinate services (e.g., transportation and health services) and to avail themselves of interagency coordination opportunities.

REFERENCES

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INTERVIEWEES, 1990-91

Linda Kennard
Reading Consultant
ESEA Chapter 1
Office of Educational Support Programs

John Durrett
State Funding
Fiscal Management
Office of Special Education

Catherine Heroman
Supervisor
Elementary Education
Office of Academic Programs

Candy Jones
Supervisor
Elementary Education
Office of Academic Programs

APPENDICES

APPENDIX A

List of State-Funded Program for High-Risk Four-Year-Olds Evaluation Reports, 1984-85 through 1989-90

1984-85

Interim Evaluation Report: 1984-85 Early Childhood Development Projects, April 1985

1985-86

Interim Evaluation Report: 1985-86 Early Childhood Development Projects, April 1986

1986-87

Interim Evaluation Report: 1986-87 Early Childhood Development Program, April 1987

Final Evaluation Report: 1986-87 Early Childhood Development Program, July 1987

1987-88

Interim Evaluation Report: 1987-88 Early Childhood Development Program, March 1988

Final Evaluation Report: 1987-88 Early Childhood Program, September 1988

1988-89

Interim Evaluation Report: 1988-89 State-Funded Program for High-Risk Four-Year-Olds, May 1989

Final Evaluation Report: 1988-89 State-Funded Program for High-Risk Four-Year-Olds, February 1990

1989-90

Evaluation Report: 1989-90 State-Funded Program for High-Risk Four-Year-Olds, July 1990

State-Funded Program for High-Risk Four-Year-Olds: Comprehensive Longitudinal Report, October 1990

1990-91

1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description, December 1990

1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part II. Follow-up Study, March 1991

1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part III. Classroom Observation Findings, June 1991

24.7. Early childhood development projects

A. Prior to the beginning of the 1985-1986 school year and for each school year thereafter, the Department of Education shall award to each city or parish school system funding for qualified projects in early childhood development as follows:

(1) One project for each school system with a total student enrollment in the previous year of nineteen thousand nine hundred and ninety-nine or less.

(2) Two projects for each school system with a total student enrollment in the previous year of at least twenty thousand but no more than thirty-nine thousand nine hundred and ninety-nine.

(3) Three projects for each school system with a total student enrollment in the previous year of at least forty thousand but no more than fifty-nine thousand nine hundred and ninety-nine.

(4) Four projects for each school system with a total student enrollment in the previous year of sixty thousand or more.

B. To qualify, each project shall be devised to serve children in the school system's community who will be eligible to enter public school kindergarten pursuant to R.S. 17:151.3 in the following year and who are at a high risk of being insufficiently ready for the regular school program but who have not been identified as eligible for special education services. Each project shall be submitted in writing to the department for approval and shall contain the following at a minimum:

(1) A statement of the needs the project is intended to address.

(2) A statement of anticipated results and the basis upon which such results are expected.

(3) A plan for identifying the children who can most benefit from the project by use of a screening test for readiness and social maturity.

(4) A specific outline of implemental steps.

(5) A detailed plan for staff usage.

(6) A detailed budget for expending the monies granted.

(7) A detailed explanation of and plan for evaluation of the project results.

C. Each school system awarded monies under this Section shall implement its project during the school year for which such monies were awarded and shall provide to the department a thorough written review of the project including documentation of how the money awarded under this Section was spent, its results, and the recommendations of the school system with regard to the project prior to July 1st following the school year during which the project was implemented. Each system shall return any of the money awarded pursuant to this Section that is unspent or reimburse the department for any money the expenditure of which is undocumented.

LOUISIANA DEPARTMENT OF EDUCATION
1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS
PROJECT DESCRIPTION SURVEY

PROJECT DIRECTOR: _____ PHONE NUMBER: _____ ____

SCHOOL SYSTEM: _____

I. Location, Enrollment, and Staffing Data: Please provide the following information for each state-funded class for high-risk four-year-olds approved by the Bureau of Elementary Education.

School - Provide the name of the school in which the high-risk four-year-old class is located.
Length of Day - Circle H if the class is half-day (165 minutes in length) or F if the class is full-day (330 minutes in length).
Student Enrollment - Indicate the number of students enrolled in the class.
Aide - Circle N, HT, or FT to indicate the extent to which teacher aides are involved in your program as per the following:
N = No aide is employed in this class.
HT = One half-time aide is employed in this class (works for up to half the length of the specified class day).
FT = One full-time aide is employed in this class (works for the full length of the specified class day).

	SCHOOL	LENGTH OF DAY	STUDENT ENROLLMENT	AIDE
Class 1:	_____	H F	_____	N HT FT
Class 2:	_____	H F	_____	N HT FT
Class 3:	_____	H F	_____	N HT FT
Class 4:	_____	H F	_____	N HT FT

Why was this school(s) chosen as a site for the program? _____

_____

II. Teacher Qualifications

Please indicate the number of teachers in your program with the following:

A. Nursery school certification (may include other areas as well) _____
B. Kindergarten certification, but not nursery school (may include other areas in addition to kindergarten) _____
C. Elementary certification, but neither kindergarten nor nursery school _____
D. Other certification, excluding elementary, kindergarten, and nursery school _____

E. Employed under special conditions _____ (Fill in numbers employed under each type listed below.)

_____ Circular 665	_____ Emergency Permit
_____ Temporary Emergency Permit	_____ Temporary Certificate
_____ Provisional Certificate	

F. No teaching certificate or special condition(s) _____

III. Participation Selection Process

1. Which of the following criteria were used in the selection of program participants? (Check all that apply.)

____a. One year younger than the age required for kindergarten
____b. Identified as at-risk based on screening results
____c. From families with annual incomes under $15,000
____d. From families who agree to participate in program activities
____e. Parent interview
____f. Chapter I eligible family
____g. Head Start waiting list
____h. Free lunch eligibility
____i. Other (What? _____)

2. Please indicate the effectiveness of the screening instrument you used in identifying at-risk students for program participation by placing one of the following (VE, E, I, or VI) in the blank next to the instrument you used: (VE = very effective, E = effective, I = ineffective, or VI = very ineffective).

____a. Brigance Pre-School Screen for Three and Four-Year-Old Children
____b. Developmental Indicators for the Assessment of Learning (Dial-R)
____c. Denver Developmental Screening Test
____d. Early Recognition Intervention Systems (ERISys)
____e. Battelle Developmental Inventory
____f. Other (What? _____)
(Why used? _____)

3. How many applicants did you have for this program? _____

4. How many eligible applicants could not be served by the program?_____

5. How was the program advertized? (Check all that apply.)

_____ Newspaper advertisement	_____ Church posting
_____ School posting	_____ Other (What?) _____
_____ Community posting	_____

IV. Family Background

1. How many families of the children served by your program are:

___a. Black ___c. Hispanic ___e. American Indian
___b. White ___d. Asian ___f. Other

2. How many of these families have annual incomes in the following categories?

___a. $0 - $10,000
___b. $10,001 - $15,000
___c. Above $15,000 (Attach written justification for allowing such participants.)

3. How many parents or guardians (principal wage earners) of children enrolled in your four-year-old program have jobs in the following categories?

___a. Professional/technical ___d. Unskilled laborers
___b. Managerial/administrators ___e. Unemployed
___c. Skilled laborers

4. How many of your students are currently living in intact family settings with both mother and father? _____

V. Program Description

1. How do teachers assess student progress? Check all that apply and then indicate the name of each instrument cited in the space provided.

___a) Pretest-posttest instrument(s) (Name(s):_____)
_____

Please indicate the effectiveness of the pretest-posttest instrument.

___ Very Effective ___ Effective ___ Ineffective ___ Very Ineffective

___b) Commercially-developed skills checklists (Name(s):_____)
_____

___c) Local/teacher-developed skills checklists (Name(s):_____)
_____

___d) Parent/teacher conferences

___e) Teacher observations of student progress

___f) Other approaches (Name: _____)

VI. Parental Involvement

1. How are parents involved in your program? (Check all that apply.)

___a. Attendance in meetings/workshops
___b. Bringing snacks
___c. Helping with parties
___d. Helping with field trips
___e. Reading stories to the children
___f. Making materials
___g. Helping with art projects
___h. Helping on the playground
___i. Helping in the cafeteria
___j. Taking children to the library
___k. Helping in some other way (How? _____)

VII. Transportation

1. How are participating children transported to and from the project site? (Check one.)

___a. The system provides transportation in both directions.
___b. The system provides transportation in one direction only. (Why? _____)
___c. The system provides transportation for students in areas served by established route but not for others.
___d. Parents are responsible for transportation in both directions. (Why? _____)

2. Answer this question only if you checked 1(b) or 1(c) or 1(d) immediately above. To what extent does transportation limit the accessibility of this program to those four-year-olds in your system who are most at risk? (Check one.)

___a. The majority are still able to participate.
___b. About half are able to participate.
___c. Fewer than half are able to participate.
___d. The program is inaccessible to those most in need.

VIII. Program Assessment

1. Among the following areas identified in previous surveys as the major strengths of the program, which apply to your 1990-91 program? (Check all that apply and add additional areas as appropriate.)

___a. Program quality, especially developmental aspects of program
___b. Parental involvement and participation
___c. Support from administration and faculty
___d. Support from community
___e. Quality of teachers and aides
___f. Early identification and assistance to at-risk students
___g. Health and medical services
___h. Quality of facilities
___i. Other (What? _____)

2. Among the following areas identified in previous surveys as major program weaknesses, which apply to your 1990-91 program? (Check all that apply and add additional areas as appropriate.)

___a. Limitations associated with late and/or insufficient funding
___b. Limited parental participation in terms of number involved
___c. Limited parental involvement in instructional areas (e.g., reading stories, making materials, helping with art projects)
___d. Weaknesses in specific developmental areas (Which areas? _____)
___e. Limited facilities or equipment
___f. Limited administrative support
___g. Lack of properly certified teachers
___h. Limitations set by the regulation on income level
___i. Lack of staff development which includes adequate training in developmentally-appropriate techniques
___j. Lack of health services
___k. Other (What?_____)

IX. Comments

Use the space below to make any additional comments and/or suggestions about any aspects of your local program that are not addressed in this instrument.

X. Verification

I verify that the information contained in this Project Description Survey is accurate.

_____ _____
Superintendent's Signature Date

Return to:

Barbara Abshire
Louisiana Department of Education
Bureau of Evaluation and Analytical Services
P. O. Box 94064
Baton Rouge, LA 70804-9064
Telephone: (504) 342-3837

THANK YOU FOR YOUR CONTINUED COOPERATION AND SUPPORT. GOOD LUCK WITH YOUR 1990-91 PROGRAM.

APPENDIX D

LOUISIANA DEPARTMENT OF EDUCATION
1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS

FOLLOW-UP STUDY OF FORMER PROGRAM PARTICIPANTS

I. To be completed by PROJECT DIRECTOR

Please complete Part I for each student who participated in the State-Funded Program for High-Risk Four-Year-Olds (formerly termed the Early Childhood Development Program) between 1984 and 1990, and forward this form to the child's current K-5 teacher for completion of Part II. Please collect and return the completed forms to the Department no later than December 15, 1990.

_____ School System

_____ Student's Name (Last, First, Middle)

_____ Present School

_____ Present Teacher

84-85 85-86 86-87 87-88 88-89 89-90
Year of Participation (Circle one.)

pre-k k k/1 1 1/2 2 3 4 5
Present Grade Level (Circle One.)

II. To be completed by PRESENT TEACHER (K-5): Please complete Part II for the student named above and return this form to the Project Director.

A. 1. Student birthdate (month/day/year) _____

2. Student Sex (M or F)_____

3. Student race (Check one.)

__Black __White __Hispanic __Asian __Native Amer. __Other

4. Special services received by this student since participation in program (Check all that apply.)

a. Special Education ____ c. Chapter 2 _____

b. Chapter 1 ____ d. Other (Name _____)

5. If this child has spent any time in a transition class, please indicate the class level(s) involved. (Check all that apply.)

a. Pre-K ____ b. K/1 ____ c. 1/2 ____ d. Other ____

6. If this child has been retained since program participation, please indicate the grade the child repeated or is repeating. (Check all that apply.)

a. K____ b. 1____ c. 2____ d. 3____ e. 4____

7. How would you rate the level of classroom participation of this child's parents relative to that of the parents of other children in your class? (Check one.)

a. ___More b. ___Same c. ___Less d. ___Don't know

B. Please use the following scale of indicators to assess the performance of the student identified above in comparison with the average performance of other children in the same class.

1 = above class average
2 = on line with class average
3 = slightly below class average
4 = unsatisfactory

CIRCLE the number that is closest to your assessment of the child's performance in each of the developmental areas identified below:

	above class average	on line with class average	slightly below class average	unsatisfactory
COGNITIVE DEVELOPMENT	1	2	3	4
DEGREE OF INDEPENDENCE	1	2	3	4
SOCIAL DEVELOPMENT	1	2	3	4
RECEPTIVE COMMUNICATION	1	2	3	4
EXPRESSIVE COMMUNICATION	1	2	3	4
FINE MOTOR DEVELOPMENT	1	2	3	4
GROSS MOTOR DEVELOPMENT	1	2	3	4

Cognitive development: counts, names, matches, recognizes, points out, recalls, etc.
Degree of independence: works on own; exhibits self-help skills in eating, dressing, toileting, grooming; exhibits self-confidence
Social development: interacts positively with other children and adults, follows directions, adapts to daily routine, accepts authority, exhibits school-appropriate behaviors
Receptive communication: uses receptive language, understands what is said
Expressive communication: uses expressive language, expresses self in language
Fine motor development: folds, cuts, draws, colors, copies, etc.
Gross motor development: moves objects, moves body, etc.

APPENDIX E

State of Louisiana

State Department of Education

"Regulations for State-Funded Programs for High-Risk Four-Year-Olds"

Office of Academic Programs

Bureau of Elementary Education

(504) 342-3366

Approved by

Wilmer S. Cody

State Superintendent of Education

July 25, 1988

Foreword

The following "Regulations for State-Funded Programs for High-Risk Four-Year-Olds" have been developed from information and recommendations provided through four years of state-level evaluations relative to the existing state programs for high-risk four-year-old children.

The regulations address the seven broad areas repeatedly identified in research studies as critical in the provision of quality early childhood programs. The state parameters are consistent with state and national research findings and with guidelines and standards recommended by the National Association for the Education of Young Children (NAEYC), the Southern Association of Children Under Six (SACUS), and the Southern Association of Colleges and Schools (SACS).

These regulations apply to all state-funded programs for high-risk four-year-olds, including those "8g" programs that reference the existing state programs. Adherence to these regulations is critical in order to assure that appropriate programs are provided for young children.

Wilmer S. Cody
Superintendent of Education

Regulations For State-Funded Programs For High-Risk Four-Year-Olds

Program Philosophy

Local early childhood programs shall adhere to the developmental philosophy proven to be effective in early childhood education. Inherent in this philosophy is the provision of a child-centered program directed toward the development of cognitive, social, emotional, communication, and motor skills in a manner and at a pace consistent with the needs and capabilities of the individual child.

Eligibility Criteria

Projects shall serve children who are as follows:

1. one (1) year younger than the age required for kindergarten;
2. at-risk of being insufficiently ready for the regular school program based on screening results;
3. from families with up to three children and an annual income under $16,000; for each additional child living at home, an additional $1,000 may be added to the base income;
4. from families that agree to participate in various activities associated with the program.

Teacher Qualifications

Teachers employed at the local school system for these projects shall be Louisiana-certified in the following:

1. Nursery school or
2. Kindergarten

Class Size Limitations

The class assignment of teachers and aides for the program shall be as follows:

Enrollment	Teacher	Aide
10-12	1	0
13-15	1	1/2 time
16-20	1	1

Length of School Day

The school day that systems operate (half-day of full-day) shall consist of one of the following:

1. Half-Day - 165 minutes of teacher-directed/child-initiated activities

2. Full-Day - 330 minutes of teacher-directed/child-initiated activities

Screening Instruments

The screening of children potentially eligible for program participation shall be accomplished through the use of those sections in one or more of the following instruments specifically designed for the identification of high-risk four-year-olds:

1. Brigance Pre-School Screen for Three and Four-Year-Old Children

2. Developmental Indicators for the Assessment of Learning (DIAL-R)

3. Denver Developmental Screening Test

4. Early Recognition Intervention Systems (ERISys)

5. Battelle Developmental Inventory - Screening Test

Program Design

Local early childhood programs shall be broad in scope and sensitive to the individual needs and capabilities of the young child. Such programs shall offer a curriculum in which each child is an active participant in varied activities targeted toward the development of specific concepts and skills.

The program shall be based on the following principles concerning human growth and development, and learning relative to high-risk four-year-olds:

1. A child learns as a total person (emotionally, socially, physically, and intellectually).

2. Children grow at individual rates.

3. Children learn through their senses (hearing, seeing, touching, tasting, and smelling).

4. Children learn through active involvement.

5. Children learn through attitudes as well as through content.

6. Children learn through play.

STANDARDS

1. Language Development

The program environment shall be designed to stimulate total language development. Learning centers shall be available that provide for:

a. Oral language expression and listening skills development

b. Oral language recorded through the use of experience charts and stories

c. Vocabulary extension through discussion and verbalization of ongoing activities

d. Reading to children daily

e. Informal exploration of picture books and other written materials

f. Visual and listening experiences

g. Extension of language concepts and skills through informal teaching and play activities

2. Physical Development

Activities related to the child's physical development shall be included on a daily basis. Learning centers shall be available that provide for:

a. Opportunities to hop, skip, jump, stretch, balance, climb, catch, and bend according to the child's individual developmental level

b. Manipulation of blocks, wheel and push toys, puzzles, and other manipulatives to develop small-muscle and eye-hand coordination

c. Opportunities to prepare and taste a wide variety of food and to discuss healthful eating habits

d. Opportunities to experience many dimensions of size and space

e. Outdoor, as well as indoor exploration

3. Social-Emotional Development

The environment (which includes teachers and aides) shall be responsive to the needs of the child, and should ensure that the child is free from undue frustration. The specified activities shall fit the child's developmental level. The classroom environment and the learning activities shall:

a. Indicate to the child that his abilities are acceptable

b. Reflect an attitude of respect and warmth toward each child

c. Provide for block-building, manipulatives, social living areas, and group participation

d. Help each child recognize the needs of others

d. Assist each child to trust the environment and the adults within that environment

4. Cognition, Problem-Solving, and Mathematical Development

Opportunities for the child to interact with the environment in the development of basic mathematical concepts and problem solving skills shall be provided on a daily basis. Learning centers shall be available that provide opportunities to:

a. Compare and contrast; to see, hear, taste, smell, and touch

b. Take apart, act on, and use diverse materials such as water, sand, earth, clay, puzzles, natural objects, and mechanical objects

c. Explore, manipulate, and count concrete objects

d. Recognize numerals through various materials including puzzles, games, recipes, books, pictures, and manipulative cut-outs

e. Develop number concepts through experiences with quantity such as weighing and measuring, pouring liquids, stacking and building with blocks, and manipulating clay and other plastic materials

f. Develop an awareness of time intervals and spatial relationships through activities such as planning the day, marking the calendar, recognizing special days and holidays, exploring the surrounding space, mapping the classroom, and talking about over and under, up and down, and far and near

5. Creative Development

Activities shall be provided that stimulate and enhance creative and imaginative development. Learning centers shall be available that provide opportunities for:

a. Observation of the environment

b. Exploration through the use of a variety of art materials

c. Development of the ability to distinguish between fantasy and reality

d. Encouragement of imagination through play, verbalization, and artistic creation

e. Exploration of movement with and without music

f. Enjoyment of music through songs, listening, and musical games

g. Exploration of creative dramatics through story-telling, role-playing, and puppetry

h. Dictation of experience stories and recording of verbal experiences

1990-1991 State-Funded Program for High-Risk Four-Year-Olds
Evaluation Report: Part II. Follow-Up Study

Prepared by
The Bureau of Evaluation
Office of Research and Development
Louisiana Department of Education

Presented to
The Bureau of Elementary Education
Office of Academic Programs
Louisiana Department of Education

November 1991

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Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants 33

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EXECUTIVE SUMMARY

The State-Funded Program for High-Risk Four-Year-Olds was initiated through Act 619 of 1984. It has expanded from 10 Local Education Agencies (LEAs) serving 315 children, funded at a total of $300,000 in the 1984-85 school year, to 63 of the 66 LEAs serving 1751 children, with 1990-91 funding from both the State and the Quality Education Trust Fund 8(g) in the amount of $3,501,500. A total of 8945 children have been served by the program since 1984. The purpose of the program is to improve the readiness of preschool-aged children who are eligible to enter kindergarten the following year and who are at risk of being insufficiently ready for the regular school program.

In addition to individual project evaluation reports required by statute from LEAs, the Bureau of Elementary Education has continued to request that the Bureau of Evaluation conduct annual comprehensive evaluations of the implementation and effectiveness of the program. The present report is Part II of the three-part 1990-91 evaluation report series. Part I provided a comprehensive program description; Part II provides follow-up study findings; and Part III will provide both classroom observation findings, and the findings of a longitudinal study involving state test results.

The purpose of the overall evaluation is to provide information to decision-makers at the state and local levels to assist them in making judgments about the extent to which the intended goals of this early childhood education program in the public schools have been attained and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing administrators of individual projects with information for use in decision-making about continuing, modifying, or developing projects for high-risk four-year-old children.

This follow-up study (Part II of the evaluation report) focuses on both the grade level progression and present classroom performance of former participants in the State-Funded Program for High-Risk Four-Year-Olds. Locating all students who participated in the program through years subsequent to their participation is not fully within the present technical capabilities of local school systems. Despite such limitations grade placement data were obtained from 56% of the total number of students who had participated in the program. Among these program graduates now enrolled in pre-kindergarten through fifth grade, 78% were found to be on grade level in terms of their progression through school. When compared to their present peers, between 61% and 98% of these graduates were rated by their present teachers as being on line with, or slightly above class average, in each of the seven developmental areas addressed by the program. The developmental area in which these students were most consistently given high ratings was that of gross motor skills.

Conclusions

The following conclusions were reached as a result of this follow-up study:

- As evidenced by the grade level progression and subsequent classroom performance of program graduates, the State-Funded Program for High-Risk Four-Year-Olds has had a positive effect on the preparation of participants for the regular school program.

- The accessibility of student longitudinal information on former program participants is decreasing as students progress through school.

Recommendations

The following recommendations are offered on the basis of this evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds:

- As evidenced by the positive impact of the program on the subsequent classroom performance of former participants, the State-Funded Program for High-Risk Four-Year-Olds should be continued, and a concerted effort made to secure increased funding so that more at-risk four-year-olds can be served.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. In order to facilitate this, as well as other longitudinal studies, it is strongly recommended that a student identification and information system be implemented statewide so that the impact of all monies directed toward education can be more accurately measured.

1

INTRODUCTION

Background

The State-Funded Program for High-Risk Four-Year-Olds was initiated through Act 619 of the 1984 Legislature. Act 323 of the 1985 Legislature authorized annual funding of the program beginning with the 1985-86 school year. The program has expanded from 10 systems serving 315 children in 1984-85, to 63 systems serving 1751 children in 1990-91. A total of 8945 children have been served since 1984. The purpose of the program is to improve the readiness of eligible preschool-aged children who are at risk of being insufficiently ready for the regular school program.

Purpose of the Evaluation

The Bureau of Evaluation within the Office of Research and Development has conducted the state-level evaluation of the program since 1984-85. The purpose of the overall evaluation is to provide information to decision makers at the state level that will assist them in making judgments about the extent to which the goals of the State-Funded Program for High Risk Four-Year-Olds have been attained, and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing the administrators of individual projects with information for use in their own decision making about continuing, modifying or expanding programs. This report, Part II. Follow-Up Study is the second in a three-part series. Other parts of the overall evaluation provide a description of the program, classroom observation findings and longitudinal study results.

Evaluation Questions

Part II of the evaluation of the State-Funded Program for High-Risk Four-Year-Olds is a follow-up study focusing on two major longitudinal aspects:

- the grade level progression of former participants
- the classroom performance of former participants in kindergarten through fifth grade

The overall evaluation question addressed by this report is:

What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fifth grade?

Evaluation Audiences

The following are the major audiences for the evaluation and are considered legitimate recipients of evaluation reports:

- The State Superintendent of Education and his Cabinet
- The State Board of Elementary and Secondary Education
- Members of the House and Senate Education Committees
- The State Department of Education Office of Academic Programs and Bureau of Elementary Education
- Administrators of individual State-Funded Programs for High-Risk Four-Year-Olds

2

METHODOLOGY

Data Sources

Part II of the evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds is quantitative in nature. Data were collected from the 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants. A copy of the instrument is provided in the Appendix.

Evaluation Procedures

The evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds began with the review, and subsequent revision of the data collection instruments by the Bureau of Evaluation in consultation with the Bureau of Elementary Education. The Project Description Survey, the Follow-Up Study of Former Program Participants form, and the accompanying cover memo were mailed to all project directors on August 14, 1990. The requested return date for the Project Description Survey to be completed by project directors was October 1, 1990. The follow-up forms were forwarded to the 1990-91 kindergarten through grade five teachers of former high-risk four-year-old program participants. The return date for these forms was December 15, 1990. Data obtained from the completed Follow-Up Study forms are included in the present report.

Description of the Instrument

The data used in the conduct of this study are drawn from the Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Participants. This Follow-Up Study instrument was adapted from the Anderson and Bower (1985) Statewide Evaluation Program for Handicapped Children In Louisiana: 1985-86 Questionnaire/Interview, Kindergarten Teachers. As adapted for this study, the instrument is composed of three sections which are to be completed by public school teachers who are currently teaching program graduates. A copy of the instrument is provided in the Appendix.

Section one of the instrument elicits information concerning grade-level placement. Section two elicits information on student retention, parental involvement, and other services received by the student. Section three of the instrument requests information relative to the seven developmental areas basic to early childhood education: Cognitive Development, Degree of Independence, Social Development, Receptive Communication, Expressive Communication, Fine Motor Development and Gross Motor Development. The kindergarten through grade five teachers currently working with program graduates are asked to assess the performance of these students in comparison with that of their present classmates in each of these areas.

Data Analysis Procedures

The Follow-Up Study instrument data are quantitative and are compiled in the form of frequencies and means for each of the seven developmental areas addressed. The results are reported by grade level in accordance with the current kindergarten through fifth grade enrollment of program graduates. Grade-level placement data are reported in the form of frequencies and percentages.

3

PRESENTATION OF THE DATA AND DISCUSSION OF THE RESULTS

Introduction

Data for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part II. Follow-Up Study were collected by means of the Follow-Up Study instrument. The instrument was sent to the LEA project coordinators in August of 1990, and completed forms were returned to the Bureau of Evaluation by January 22, 1991. The data collected are organized and reported in the following paragraphs as a response to the evaluation question addressed by the study.

Evaluation Question: What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fifth grade?

Background

The State-Funded Program for High-Risk Four-Year-Olds was begun in 1984-85 with the implementation of 10 pilot classes serving a total of 315 students. Since that time, these and subsequent program graduates have continued their grade level progression through school with varying degrees of success. While initial 1984-85 participants could have reached fifth grade during the 1990-91 school year, students enrolled in the 1989-90 program could have progressed to kindergarten.

Since the second program year, follow-up studies of program graduates have been conducted as part of the state evaluation of the longitudinal impact of pre-school early childhood education on subsequent school performance. Longitudinal

information is presented for all six groups of former participants involved in the program since its initial year of operation (1984-85).

Eligibility for participation in the four-year-old program assumes the presence of developmental deficiencies among potential candidates. Once identified as "at risk of being insufficiently ready for the regular school program," it is expected that without intervention, these students will be less well-developed socially, physically, and intellectually than other children their age.

Grade Level Progression

One aspect of the longitudinal study of former participants in the high-risk four-year-old program focuses on the actual progression of these students through the regular school program. Due to the absence of a statewide student identification and/or information system, the retrieval of longitudinal data of this type relies on data collection mechanisms in place at the local level. Transfers across local education agencies (LEAs) and/or state boundaries compound the difficulty of obtaining longitudinal information. As a result, the proportions of former project students for whom complete 1990-91 data are available is as follows:

Project Participation Year	Proportion for Whom Data Are Available
1984-85	22.5%
1985-86	39.5%
1986-87	51.0%
1987-88	56.6%
1988-89	61.4%
1989-90	71.1%

From these data it can be seen that of the attrition rate relating to the accessibility of student information increases with the time interval since participation in the program. This is further illustrated in Figure 1.

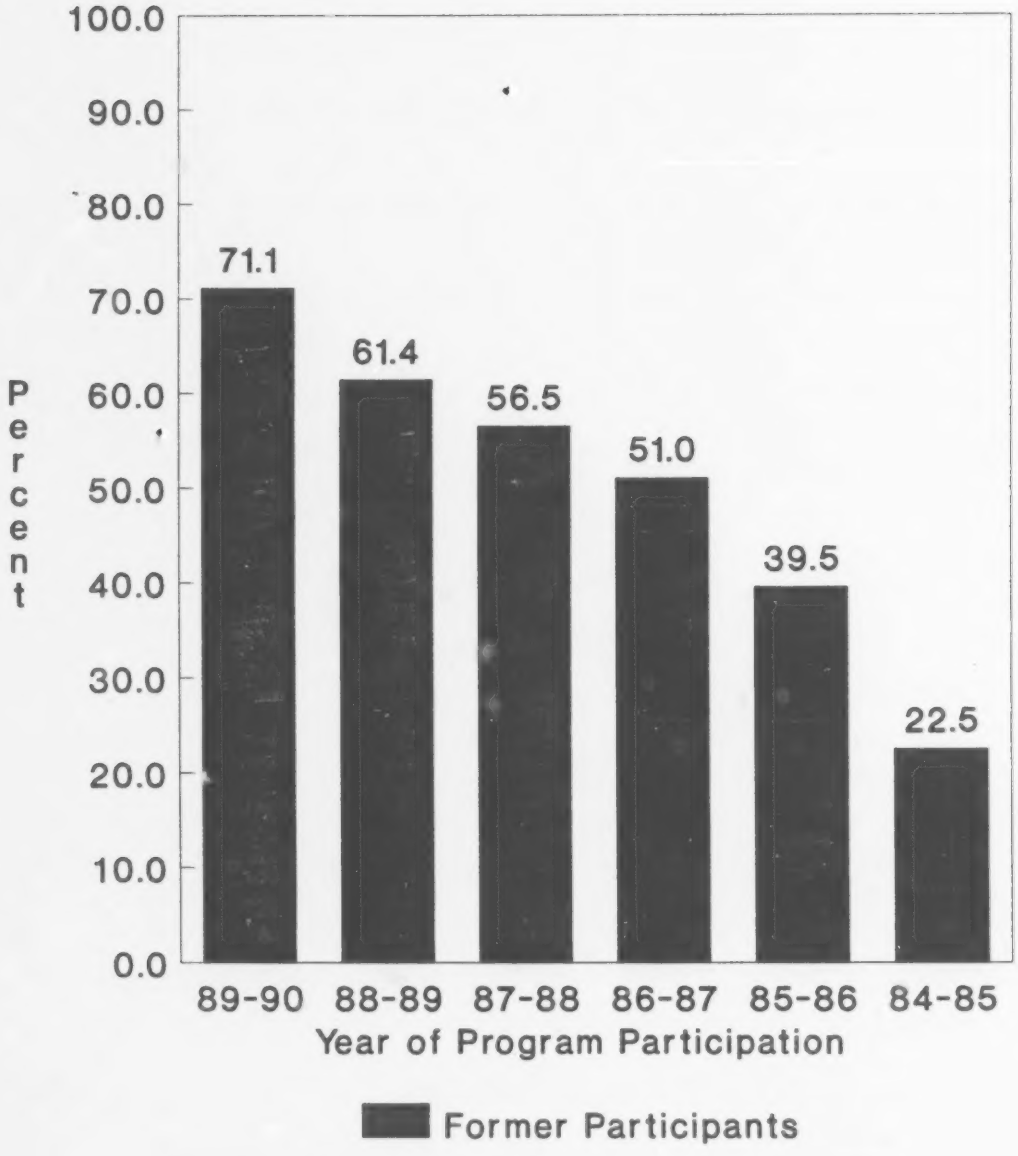

Figure 1. Percent of Participants for Whom Complete Data Were Obtained

For the 1990-91 school year, complete placement data were obtained for 4014 students. This represents 55.9% of the total number of students (7182) who have participated in the program since its inception. Although 4556 forms were returned, grade placement data were missing for 542 (11.8%) of the students.

Former program participants in the initial 1984-85 group, subsequently assessed to be on level with their peers, would have progressed to fifth grade by 1990-91. The 1985-86 graduates would have advanced to fourth grade, while third grade is the maximum level to which the 1986-87 group could have progressed. Participants in the 1987-88 program should have reached second grade, while those in the 1988-89 group should have been in first grade. The 1989-90 participants, assessed as being on grade level, should have been in kindergarten in 1990-91. The actual placement of such students for the 1990-91 school year is shown in Table 1. The percentages of program graduates found to be on/below grade level are illustrated in Figure 2.

Class of 1984-85. For purposes of the present report, the class year cited refers to the year the children were in the state-funded program. The highest grade level to which the 315 students enrolled in the program in 1984-85 could have progressed was fifth grade. As shown in Table 1, data relative to these students indicate that 43 (60.6%) of the 71 for whom information was received were, in fact, enrolled in fifth grade during the 1990-91 school year. However, 21 (29.6%) of the students in that 1984-85 group were reported as enrolled in fourth grade, with the remaining seven students (9.9%) being in third grade in 1990-91. Overall, these data indicate that 60.6% of the 1984-85 program graduates for whom information was available (43 of the 71), had progressed to their maximum expected grade level (fifth grade), while the remaining 39.4% were currently one to two years below that level.

Table 1. Current Grade Placement of Former Program Participants
(N=4014)

Actual Grade Placement for 1990-91

Year of Program Participation	* MEL	Pre K/K Transition		Kinder-garten K		K/1 Transition		Grade 1		1/2 Transition		Grade 2		Grade 3		Grade 4		Grade 5		Students on Grade Level	
		N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
1984-85 (N= 71)	5													7	9.9	21	29.6	43	60.6	43	60.6
1985-86 (N= 434)	4	--	--	--	--	--	--	--	--	--	--	25	5.8	136	31.3	273	62.9	--	--	273	62.9
1986-87 (N= 649)	3	--	--	--	--	--	--	27	4.2	--	--	187	28.8	435	67.0	--	--	--	--	435	67.0
1987-88 (N= 694)	2	--	--	--	--	4	0.6	209	30.1	4	0.6	477	68.7	--	--	--	--	--	--	477	68.7
1988-89 (N= 991)	1	--	--	171	17.3	34	3.4	785	79.2	1	0.1	--	--	--	--	--	--	--	--	786	79.3
1989-90 (N=1175)	K	44	3.7	1128	96.0	3	0.3	--	--	--	--	--	--	--	--	--	--	--	--	1131	96.3
Total (N=4014)	-	44	1.1	1299	32.4	41	1.0	1021	25.4	5	0.1	689	17.2	578	14.4	294	7.3	43	1.1	3145	78.4

*Maximum Expected Level

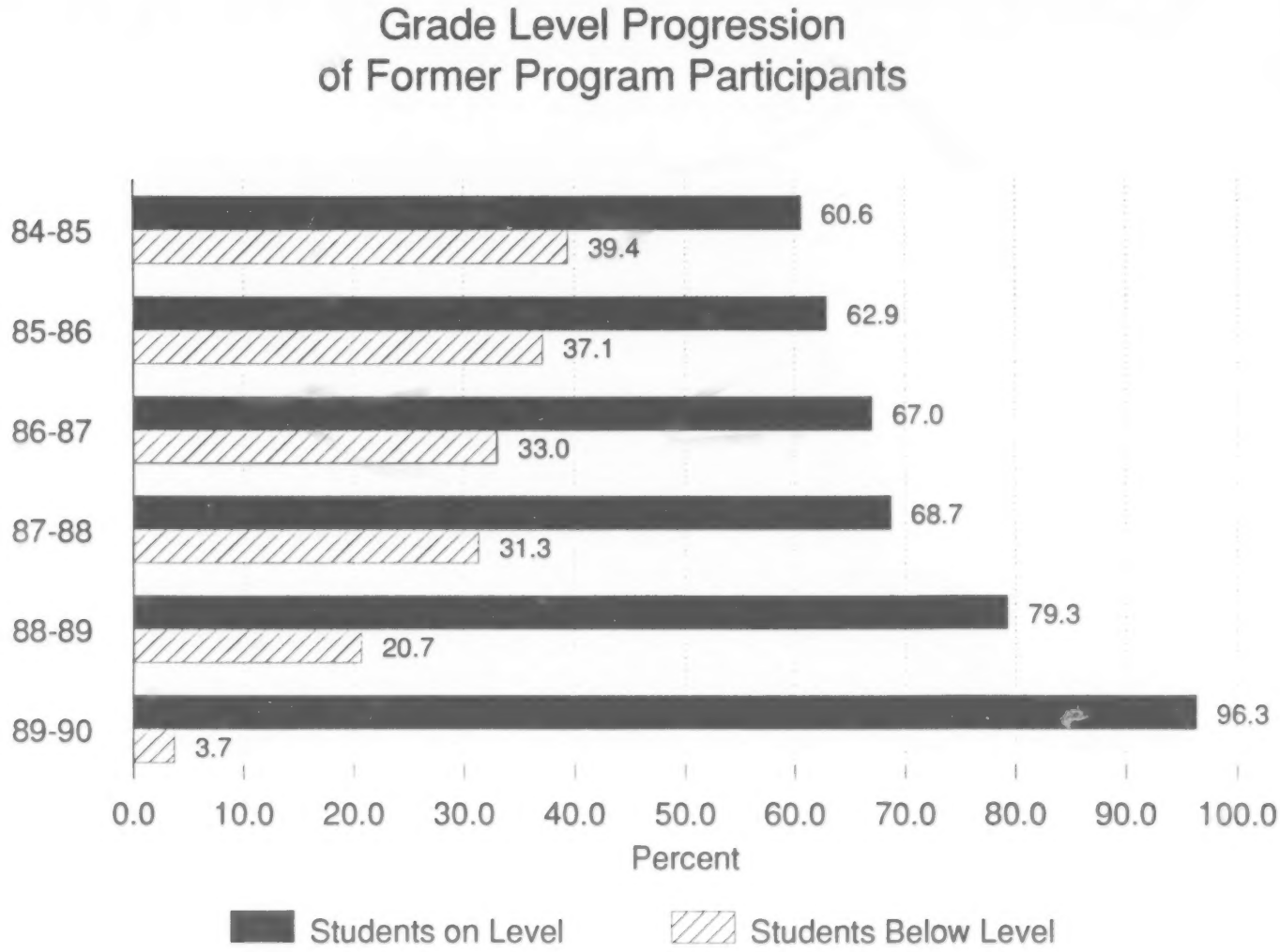

Figure 2. Percent of Program Participants On and Below Grade Level

Class of 1985-86. Grade level data received with respect to 434 of the 1112 children who were in the 1985-86 program show that 273 of these former program participants (62.9%) were at their maximum expected fourth grade level, while 136 students (31.3%) were in third grade. Twenty-five of these students (5.8%) were in second grade. Overall, 62.9% of the 1985-86 students were on grade level, while the remaining 37.1% were below grade level.

Class of 1986-87. For the 1272 students who were in the 1986-87 class, longitudinal data received relative to 649 of these indicate that 435 (67.0%) were enrolled at the maximum expected third grade level during the 1990-91 school year. Data received indicate that 187 (28.8%) were in second grade classes while 27 (4.2%) were in first grade. Overall, 67.0% of the 1986-87 program participants were on grade level, with the remainder (33.0%) below grade level.

Class of 1987-88. Longitudinal data received for 694 of the 1228 students who participated in the program during the 1987-88 indicate that 477 (68.7%) of these students were currently at the maximum expected second grade level, while four (0.6%) were in transitional first grade classes (1/2). Of the remaining students, 209 (30.1%) were in first grade classes, while four (0.6%) were in transitional kindergarten (K/1). Thus, 68.7% of these 1987-88 program graduates were on grade level; 31.3% were below grade level.

Class of 1988-89. Data received for 991 of the 1614 participants in the 1988-89 program indicate that one (0.1%) student was in a transitional first grade class, while 785 (79.2%) were at the maximum expected first grade level. Thirty-four students (3.4%) were in transitional kindergarten (K/1) classes. The remaining 171 (17.3%) students were in kindergarten classes. Overall, 786 (79.3%) of the 1988-89 program graduates were on grade level.

Class of 1989-90. Grade placement data received for 1175 (71.1%) of the 1653 1989-90 program participants indicate that 1131 (96.3%) were at the maximum expected grade level (kindergarten). This number included 1128 (96.0%) students who were in kindergarten, and three (0.3%) students who were in a transitional first grade (K/1) class. Forty-four (3.7%) students from this group were placed in transitional kindergarten (Pre-K/K) classes.

Six-year progression summation. Aggregation of the overall grade level progression data for the former State-Funded Program for High-Risk Four-Year-Olds participants for whom such information was received shows that, taken as a composite group, 78.4% of these students were on line with their peers in terms of their grade-level placement. Correspondingly, the remaining 21.6% were somewhat below their peers in terms of the maximum grade level to which they could have advanced by the 1990-91 school year.

Mean Performance Ratings

A second aspect of the longitudinal study of former high-risk four-year-old program participants focuses on the classroom performance of these students compared with that of their 1989-90 kindergarten through fifth grade peers. As part of the Follow-Up Study information relative to each program graduate, teachers currently working with former program participants were asked to rate the performance of these students in comparison with that of the other children in their respective classes who had not been involved in the program. The seven developmental areas assessed in the rating included cognitive development, degree of independence, social development, receptive communication, expressive communication, fine motor development, and gross motor development. Numerical values specified for use in assessing student performance in each of these areas

ranged from 1.0 to 4.0, with the 1.0 value representing the most positive rating of "above class average," and the 4.0 value representing the most negative assessment of "unsatisfactory." The results of this assessment are presented by developmental area and current grade placement in Table 2.

Transitional pre-kindergarten, 1990-91. As illustrated in the table, former high-risk four-year-old program participants enrolled in transitional pre-kindergarten (Pre-K/K) attained mean ratings between 2.3 and 2.0 across the sevendevelopmental areas addressed by the scale. These students were reported to be on line with the class average in one area (gross motor development) and between the "on line" and "slightly below class average" categories in the other six areas assessed. However, the mean ratings in these six areas were closer to the "on line with class average" category than to the "slightly below class average" designation.

Kindergarten, 1990-91. Kindergarten students who were former program participants received mean ratings ranging from 2.1 through 1.9. These students were reported to be on line with the class average in two areas and slightly below the class average in four of the seven developmental areas. Ratings indicating performance a bit above class average (mean=1.9) were reported in one area (gross motor development).

Transitional kindergarten, 1990-91. Mean ratings assigned to students placed in transitional kindergarten (K/1) ranged from 2.3 through 2.0. The performance of this group of students was thus assessed to be on line with the class average in two areas and between on line with class average and slightly below the class average in the other five areas. The 2.3 to 2.1 mean scores in these five areas indicate performance more closely to being on line with class average than to being below class average.

Table 2. Mean Ratings of the Current Performance of Former Participants in Comparison With That of Their Nonparticipant Peers

Rating Scale: 1.0 = above class average
2.0 = on line with class average
3.0 = slightly below class average
4.0 = unsatisfactory

Grade Level	Cognitive Development		Degree of Independence		Social Development		Receptive Communication		Expressive Communication		Fine Motor Development		Gross Motor Development	
	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating	N	Rating
Pre-K/K	44	2.2	44	2.2	43	2.2	44	2.3	44	2.3	44	2.1	44	2.0
K	1314	2.1	1317	2.0	1316	2.1	1319	2.0	1313	2.1	1317	2.1	1319	1.9
K/1	41	2.1	41	2.1	40	2.1	41	2.3	40	2.2	41	2.0	41	2.0
First Grade	1048	2.1	1051	2.2	1054	2.2	1051	2.2	1051	2.2	1054	2.1	1054	1.9
1/2	7	1.7	7	1.9	7	1.7	7	1.7	7	1.7	7	1.9	7	1.7
Second Grade	733	2.0	731	2.0	731	2.0	733	2.0	732	2.0	732	1.9	733	1.8
Third Grade	594	1.9	596	1.9	596	2.1	593	2.0	596	2.1	598	1.9	599	1.9
Fourth Grade	300	1.9	303	2.0	303	1.9	303	1.9	303	2.0	302	1.8	303	1.8
Fifth Grade	44	1.7	44	1.9	43	1.8	45	1.9	45	1.9	45	1.8	45	1.8

First grade, 1990-91. First grade students received mean ratings ranging from 2.2 to 1.9. A rating of very slightly above class average (1.9) was reported in one developmental area (gross motor development), with ratings between slightly below the class average being reported in the remaining six areas.

Transitional first grade, 1990-91. Ratings reported for seven transitional first grade students (1/2) ranged from 1.9 to 1.7. As illustrated in the table, these students were reported to be slightly above the class average in all developmental areas.

Second grade, 1990-91. Ratings assigned to second grade students who had previously participated in the high-risk four-year-old program ranged from 2.0 to 1.8. These students were assessed to be slightly above the class average in two areas and on line with class average in the remaining five developmental areas.

Third grade, 1990-91. Former participants who reached third grade this school year received mean ratings ranging from 2.1 to 1.9. Ratings slightly above the class average were reported in four developmental areas. Slightly below the class average results were found with respect to two areas, while on line with class average ratings were reported in the remaining area.

Fourth grade, 1990-91. Ratings reported for fourth grade students ranged from 2.0 to 1.8. These students were assessed to be on line with the class average in two areas, and between on line with class average and slightly above class average in the other five.

Fifth grade, 1990-91. Fifth grade students who were former participants received mean ratings ranging from 1.9 to 1.7. These students were reported to be slightly above the class average in all seven developmental areas.

Mean performance summation, 1990-91. Viewing the mean scores of the students in each group across all seven developmental areas reveals that, of former

program participants currently enrolled in pre-kindergarten, kindergarten, first, second, and fourth grade, the gross motor developmental area was the most positively rated area. Students in transitional kindergarten had equally high ratings in both fine motor development and gross motor development. Third grade students were rated most positively in four areas: cognitive development, degree of independence, fine motor development and gross motor development. Cognitive development received the most positive rating (1.7) among students who had reached fifth grade. With the exception of fifth grade students, the former program participants received at least one of their highest ratings in the area of gross motor development.

Rating Percentages at Each Level by Developmental Area

Information concerning the percentages of the former high-risk four-year-old program participants who received ratings at each of the designated levels (1.0 through 4.0) with respect to the seven developmental areas is presented in Table 3. The percentages of students rated as above or on line with class average, as compared with those rated below class average or unsatisfactory, are illustrated in Figure 3. As illustrated, these percentages are broken out according to the 1990-91 grade placement of the program graduates.

Transitional pre-kindergarten, 1990-91. Of former program participants currently enrolled in transitional pre-kindergarten, between 61.3% and 72.8% were assessed to be on line or above class average in each of the seven developmental areas examined. The gross motor skills area was that in which the greatest percentage (72.8%) of these students were most highly rated, while the area of expressive communication was that in which the greatest number (38.7%) received ratings slightly below class average or unsatisfactory.

Table 3. Percentages of Program Graduates Rated at Each Level Across the Seven Developmental Areas Assessed

Percentages of Graduates Rated at Each Level

Current Grade Placement	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
Pre-K/K						
Cognitive development (N=44)	25.0	40.9	65.9	22.7	11.4	34.1
Degree of independence (N=44)	25.0	38.6	63.6	27.3	9.1	36.4
Social development (N=43)	30.2	34.9	65.1	20.9	14.0	34.9
Receptive communication (N=44)	22.7	45.5	68.2	15.9	15.9	31.8
Expressive communication (N=44)	22.7	38.6	61.3	20.5	18.2	38.7
Fine motor (N=44)	29.6	34.1	63.7	29.6	6.8	36.4
Gross motor (N=44)	27.3	45.5	72.8	25.0	2.3	27.3
Kindergarten						
Cognitive development (N=1314)	23.9	50.3	74.2	19.0	6.8	25.8
Degree of independence (N=1317)	24.9	55.5	80.4	14.2	5.4	19.6
Social development (N=136)	21.2	57.7	78.9	15.9	5.2	21.1
Receptive communication (N=1319)	22.1	56.5	78.6	17.0	4.5	21.5
Expressive communication (N=1313)	20.5	54.5	75.0	19.5	5.5	25.0
Fine motor (N=1317)	20.6	55.0	75.6	19.9	4.6	24.5
Gross motor (N=1319)	19.5	70.8	90.3	8.5	1.2	9.7
K/1						
Cognitive development (N=41)	19.5	51.2	70.7	26.8	2.4	29.2
Degree of independence (N=41)	12.2	68.3	80.5	14.6	4.9	19.5
Social development (N=40)	10.0	67.5	77.5	22.5	0.0	22.5
Receptive communication (N=41)	14.6	51.2	65.8	26.8	7.3	34.1
Expressive communication (N=40)	12.5	57.5	70.0	27.5	2.5	30.0
Fine motor (N=41)	17.1	63.4	80.5	19.5	0.0	19.5
Gross motor (N=41)	14.6	73.2	87.8	12.2	0.0	12.2

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Table 3 (cont'd)

Percentages of Graduates Rated at Each Level

Current Grade Placement	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
First Grade						
Cognitive development (N=1048)	19.3	55.5	74.8	18.6	6.6	25.2
Degree of independence (N=1051)	19.6	52.9	72.5	20.2	7.3	27.5
Social development (N=1054)	12.6	61.9	74.5	19.7	5.8	25.5
Receptive communication (N=1051)	16.0	58.2	74.2	19.5	6.3	25.8
Expressive communication (N=1050)	15.1	55.9	71.0	23.4	5.5	28.9
Fine motor (N=1054)	17.6	62.8	80.4	15.6	4.1	19.7
Gross motor (N=1054)	15.8	75.9	91.7	7.2	1.1	8.3
1/2 Grade						
Cognitive development (N=7)	28.6	71.4	100.0	0.0	0.0	0.0
Degree of independence (N=7)	28.6	57.1	85.7	14.3	0.0	14.3
Social development (N=7)	28.6	71.4	100.0	0.0	0.0	0.0
Receptive communication (N=7)	28.6	71.4	100.0	0.0	0.0	0.0
Expressive communication (N=7)	28.6	71.4	100.0	0.0	0.0	0.0
Fine motor (N=7)	28.6	57.1	85.7	14.3	0.0	14.3
Gross motor (N=7)	28.6	71.4	100.0	0.0	0.0	0.0
Second Grade						
Cognitive development (N=733)	25.7	53.5	79.2	19.9	1.0	20.9
Degree of independence (N=733)	27.4	50.2	77.6	19.2	3.3	22.5
Social development (N=731)	21.5	57.9	79.4	17.5	3.2	20.7
Receptive communication (N=733)	22.4	55.0	77.4	20.9	1.8	22.7
Expressive communication (N=732)	20.8	53.8	74.6	22.1	3.3	25.4
Fine motor (N=732)	23.9	64.6	88.5	10.3	1.2	11.5
Gross motor (N=733)	23.5	70.5	94.0	5.7	0.3	6.0

Table 3 (cont'd)

Percentages of Graduates Rated at Each Level

Current Grade Placement	Above class average	On line with class average	Total on line or above	Slightly below class average	Unsatisfactory	Total below or unsatisfactory
Third Grade						
Cognitive development (N=594	25.6	56.7	82.3	15.2	2.5	17.7
Degree of independence (N=596)	27.2	51.5	78.7	17.5	3.9	21.4
Social development (N=596)	17.6	61.1	78.7	17.8	3.5	21.3
Receptive communication (N=593)	19.6	59.7	79.3	18.2	2.5	20.7
Expressive communication (N=596)	18.0	58.2	76.2	20.3	3.5	23.8
Fine motor (N=598)	20.6	70.1	90.7	7.5	1.8	9.3
Gross motor (N=599)	16.9	78.6	95.5	4.0	0.5	4.5
Fourth Grade						
Cognitive development (N=300)	28.7	56.3	85.0	13.3	1.7	15.0
Degree of independence (N=303)	29.4	49.5	78.9	17.5	3.6	21.1
Social development (N=303)	22.4	64.4	86.8	11.2	2.0	13.2
Receptive communication (N=303)	24.1	60.7	84.8	12.5	2.6	15.1
Expressive communication (N=303)	24.8	57.8	82.6	15.2	2.3	17.5
Fine motor (N=302)	26.8	67.6	94.4	5.0	0.7	5.7
Gross motor (N=303)	23.4	74.9	98.3	1.7	0.0	1.7
Fifth Grade						
Cognitive development (N=44)	34.1	63.6	97.7	2.3	0.0	2.3
Degree of independence (N=44)	27.3	59.1	86.4	11.4	2.3	13.7
Social development (N=43)	27.9	65.1	93.0	7.0	0.0	7.0
Receptive communication (N=45)	22.2	64.4	86.6	11.1	2.2	13.3
Expressive communication (N=45)	22.2	66.7	88.9	8.9	2.2	11.1
Fine motor (N=44)	26.7	66.7	93.4	4.4	2.2	6.6
Gross motor (N=45)	22.2	73.3	95.5	2.2	2.2	4.4

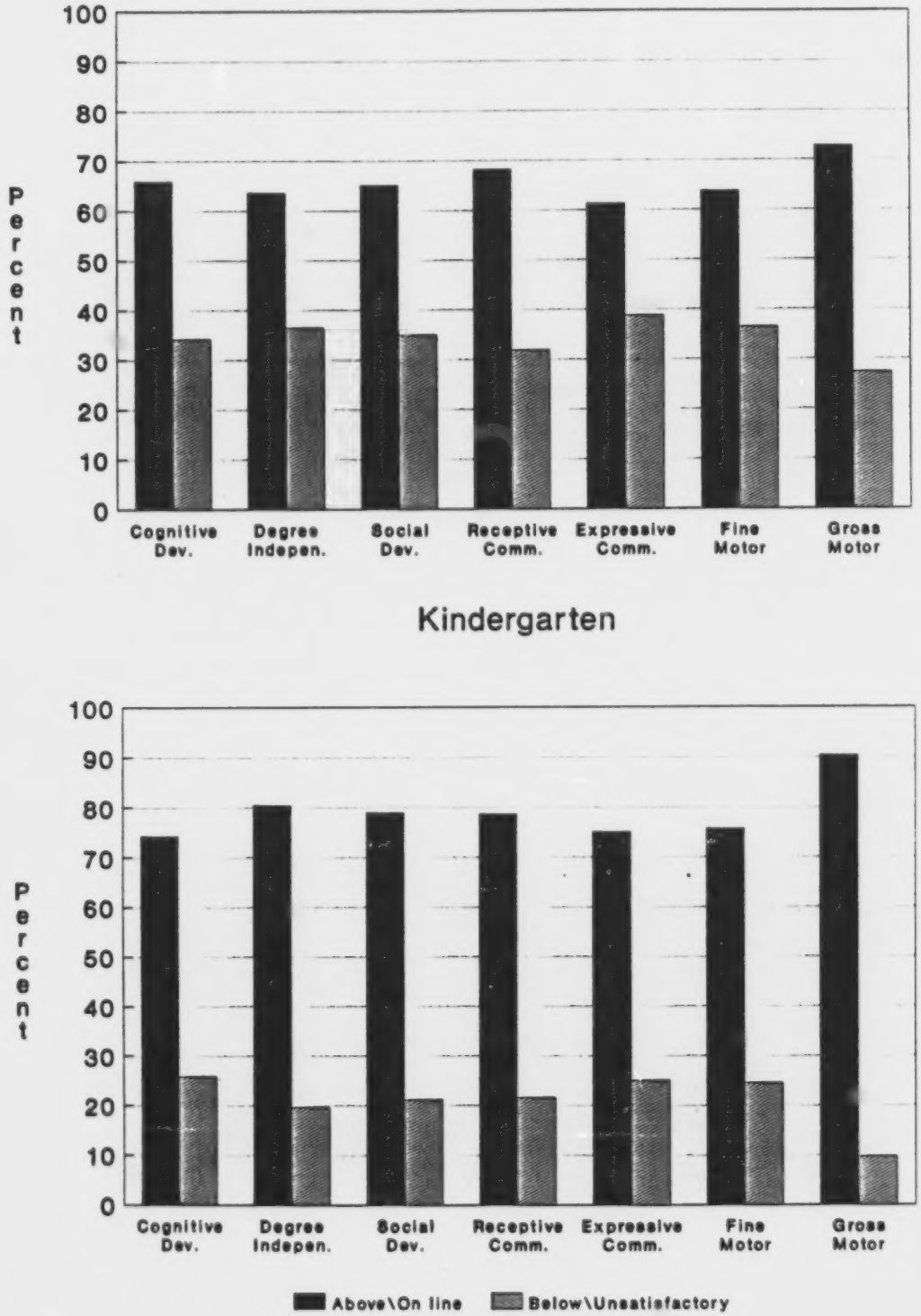

Figure 3. Graduates Rated at Each Level

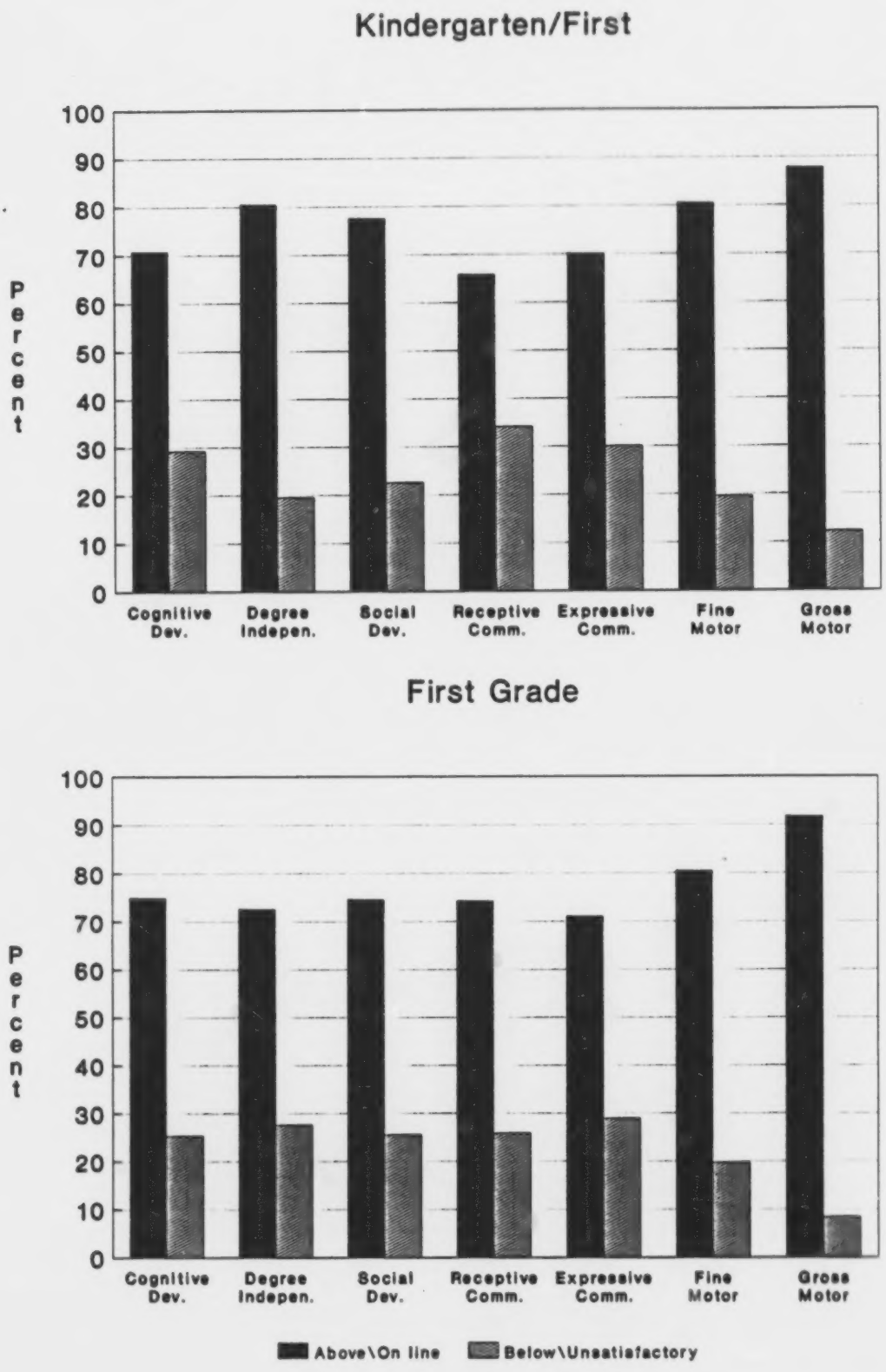

Figure 3. (continued)

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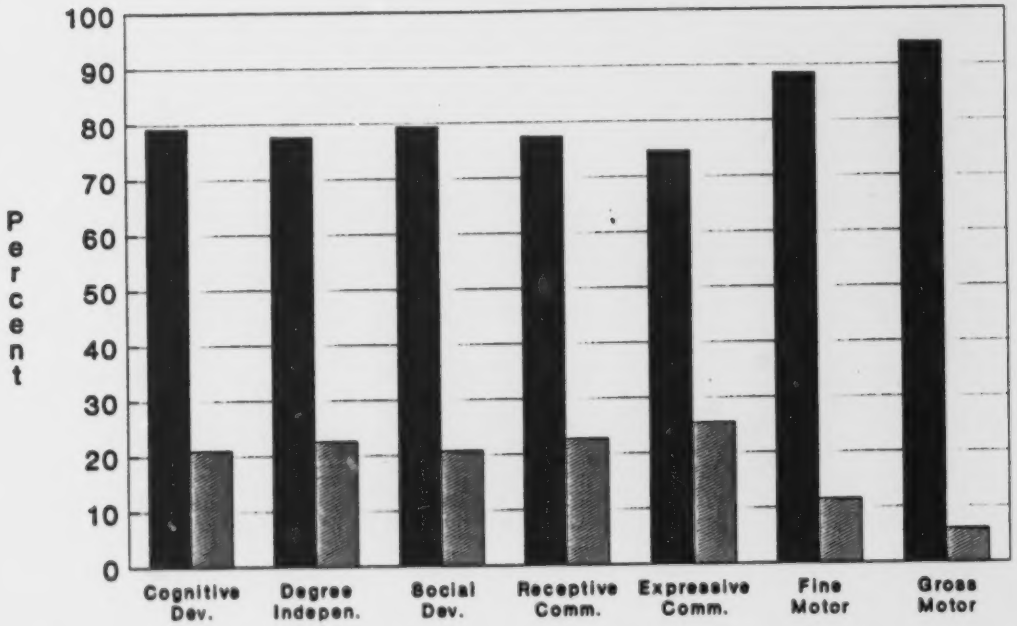
Second Grade



Third Grade

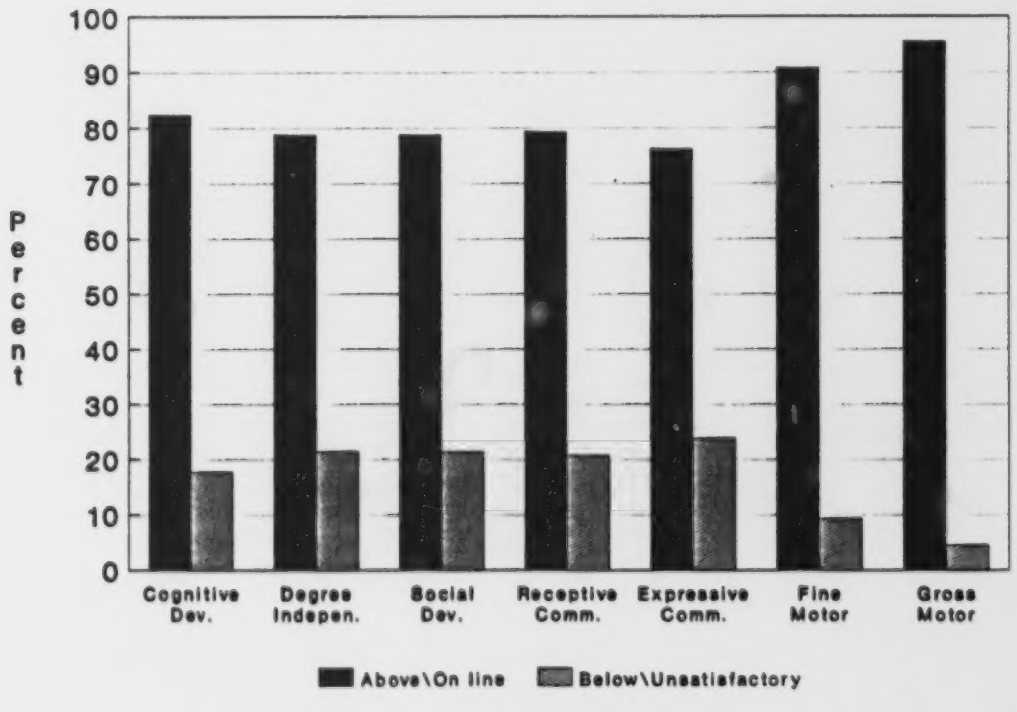
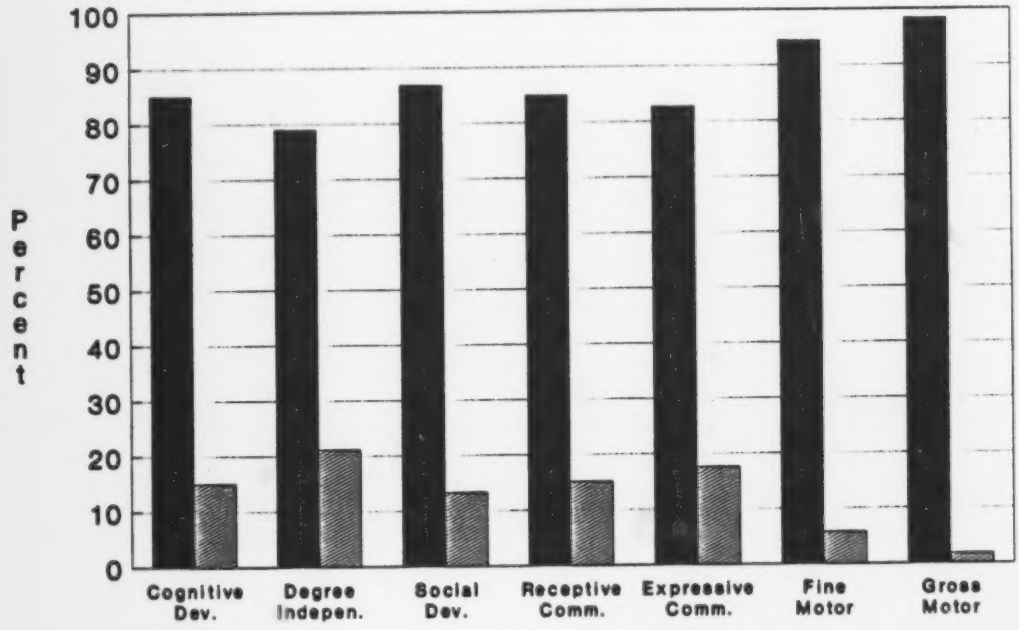


Figure 3. (continued)

Fourth Grade



Fifth Grade

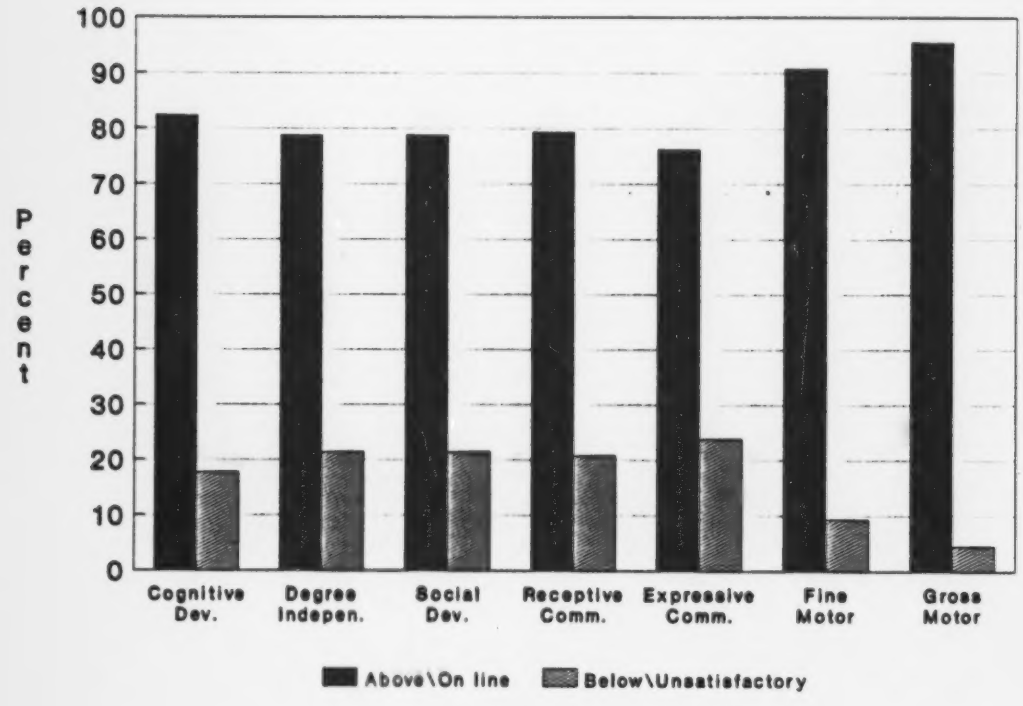


Figure 3. (continued)

Kindergarten, 1990-91. Between 74.2% and 90.3% of kindergarten students were rated as on line with or above the class average in each of the seven areas when compared with their peers. The area in which the greatest percentages were so rated was that of gross motor skills (90.3%). Cognitive development was the area in which the highest percentage (25.870) of these students were assessed to be somewhat unsuccessful.

Transitional kindergarten, 1990-91. Between 65.8% and 87.8% of the students placed in transitional kindergarten (K/1) received ratings of on line with the class average and above class average across the seven developmental areas addressed by the Follow-Up Study instrument. The gross motor skills area was again the one in which the greatest percentage (87.8%) were found to be successful, while the area of receptive communication was the developmental area in which the greatest number (34.1%) were found to be somewhat unsuccessful.

First grade, 1990-91. Within the group of program graduates currently enrolled in first grade, ratings of at least on line with the class average were reported between 71.0% and 91.7% of these former participants across all areas. Consistent with the performance of the preceding groups, the gross motor skills area was again the developmental area in which success was most frequently observed (among 91.7%). The expressive communication skills area was the one in which the greatest percentage (28.9%) were assessed to be somewhat unsuccessful.

Transitional first grade, 1990-91. Between 85.7% and 100.0% of the seven students placed in transitional first grade (1/2) were rated to be at least on line with the class average across the seven areas addressed. All of these students (100%) were rated at least on line with class average in five of the seven developmental areas. In the remaining two areas (degree of independence and fine motor skills), 85.7% of these students were assessed to be at least on line with class average.

Second grade, 1990-91. Of the program graduates currently in second grade, between 74.6% and 94.0% were found to be on line with, or above the class average, in each of the seven developmental areas. The gross motor skills area was again the one in which success was most often reported (94.0%). The expressive communication skill area was that in which the highest percentage (25.4%) were reported to be slightly below class average or unsatisfactory.

Third grade, 1990-91. Between 76.2% and 95.5% of the current third graders received ratings of at least on line with the class average in each of the seven developmental areas addressed. Consistent with the groups discussed previously, the area in which the greatest percentage (95.5%) received at least the on line with class average rating was gross motor skills development. The area in which these students were least successful was expressive communication, where 23.8% were rated as slightly below class average or unsatisfactory.

Fourth grade, 1990-91. Of former participants who reached fourth grade during the 1990-91 school year, between 78.9% and 98.3% were assessed to be at least on line with the class average. The gross motor skills area was again the area most highly rated. The area in which the highest percentage (21.1%) of these students were reported to be below class average was that of degree of independence.

Fifth grade, 1990-91. Between 86.4% and 97.7% of the 1984-85 program participants who had reached fifth grade were rated to be at least on line with the class average. Cognitive development was the area in which the greatest percentage of students (97.7%) were most highly rated. As was observed earlier among the fourth grade student group, the area in which the highest percentage (13.7%) of the fifth grade students were rated as slightly below class average was also that of degree of independence.

Percentage rating summation, 1990-91. Across all grade levels, between 61% and 98% of the students who had participated in the State-Funded Program for High-Risk Four-Year-Olds were rated by their present teachers as being at least on line with class average. The developmental area in which these students were most consistently given high ratings was that of gross motor skills. Low ratings were most consistently given in the areas of expressive communication and degree of independence.

Other Program Participant Information

Since parental involvement is a crucial component of the program, as part of the Follow-Up Study, teachers were asked to rate the level of involvement of parents of students who had participated in the program as compared with that of parents of nonparticipants. This information was reported for 4289 (94.1%) of the former participants for whom complete data relative to this item were provided. The compilation of these ratings were as follows:

Rating of Involvement Level	Level	Number
More	858	20.0%
Same	2329	54.3%
Less Than	794	18.5%
Don't Know	308	7.2%

Examination of these results indicate that, among 20.0% (858) of the students rated, parental participation among the parents of program graduates was greater than that among the parents of other children who had not been involved in the program. Parental participation was rated the same as that for other children in the class for 54.3% (2329) of the former participants. Teachers rated parental participation as less than that of other children for 794 (18.5%) of the former program participants, and checked "Don't Know" for the remaining 308 (7.2%) students. Overall, parental participation for 74.3% (3187) of the former participants

rated was judged to be at least equal to that observed with respect to the parents of other students in the classes assessed.

According to teachers of former program participants, 30% (1366) of the program graduates for whom complete data were obtained have received Chapter 1 services since participation in the State-Funded Program for High-Risk Four-Year-Olds. The most current data relative to the statewide Chapter 1 participation rate among all students across the kindergarten - fifth grade span reflects a 22% participation rate (for the 1988-89 school year).

4

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Findings

The major findings of this study are summarized with respect to the evaluation question addressed and are presented below.

Evaluation Question: What has been the longitudinal impact of the State-Funded Program for High-Risk Four-Year-Olds on "graduates" now enrolled in kindergarten through fifth grade?

In the absence of a state-wide student information system, the retrieval of longitudinal data for a comprehensive study such as is needed here must rely on data collection mechanisms already in place at the local level. The difficulties encountered by local systems in developing and maintaining a system of this type has resulted in student information becoming increasingly difficult to obtain. However, despite the technical limitations encountered by many local systems, grade placement data were collected for 56% (4014) of the total number of former program participants. The results presented below reflect data relative to these 4014 students.

A. Grade level progression

- Overall, 78% of the program graduates were on grade level in terms of their progression through school.
- Specifically, 61% of the 1984-85 participants were on grade level, as were 63% of the 1985-86 participants, 67% of the 1986-87 group, 69% of the 1987-88 group, 79% of the 1988-89 group and 96% of the 1989-90 group.

B. **Mean performance ratings**

- Program graduates in fifth grade were assessed by their current teachers as being between "on line" with the class average and "above class average" in all seven developmental areas.
- Program graduates in fourth grade were reported to be "on line" with the class average in two areas and between "on line" and "above class average" in the other five developmental areas.
- Program graduates in third grade were between "on line" with the class average and "slightly below class average" in two areas. These students were reported to be "on line" with their peers in one developmental area, and between "on line" and "above class average" in the other four areas.
- Program graduates in second grade were "on line" with their peers in five developmental areas, and between "on line" and "below class average" in two areas.
- Program graduates in first grade were between "on line" with the class average and "below class average" in six developmental areas, and between "on line" and "above class average" in one area.
- Program graduates in kindergarten were between "on line with class average" and "slightly below class average" in four areas, "on line" in two areas, and between "on line" and "above class average" in one area.
- In general, students in transitional pre-kindergarten and transitional kindergarten (K/1) classes were "slightly below class average" in most of the seven developmental areas assessed.

- The developmental area in which program graduates were most consistently given high ratings was that of gross motor skills development.
- The developmental area in which program graduates were most consistently given low ratings was that of expressive communication.

C. Rating percentages by performance level

- Among program graduates in transitional pre-kindergarten classes, between 61% and 73% were at least on line with class average in each of the seven developmental areas examined.
- Among program graduates in kindergarten classes, between 74% and 90% were at least "on line" with the class average in each of the seven developmental areas examined.
- Among program graduates in transitional kindergarten (K/1) classes, between 66% and 88% were at least "on line" with the class average in each of the seven developmental areas examined.
- Among program graduates in first grade classes, between 71% and 92% were at least "on line" with the class average in each of the seven developmental areas examined.
- Among program graduates in second grade classes, between 75% and 94% were at least "on line" with the class average in each of the seven developmental areas examined.
- Among program graduates in third grade classes, between 76% and 96% were at least "on line" with the class average in each of the seven developmental areas examined.

- Among program graduates in fourth grade, between 79% and 98% were at least "on line" with the class average in each of the developmental areas examined.
- Among program graduates in fifth grade, between 86% and 98% were at least "on line" with the class average in each of the seven developmental areas examined.

Conclusions

- As evidenced by the grade level progression and subsequent classroom performance of program graduates for whom complete data were available, the State-Funded Program for High-Risk Four-Year-Olds has had a positive effect on the preparation of participants for the regular school program.

Rationale: Longitudinal data indicate that 78% of the students who participated in the program are on line with their peers in terms of their current grade-level enrollment. When compared with their present classmates in each of the seven developmental areas addressed by the program, between 61% and 98% of the program graduates were assessed to be at least on line with their peers in terms of their classroom performance in each of the seven areas addressed in early childhood programs.

Recommendations

- As evidenced by the positive impact of the program on the subsequent classroom performance of former participants, the State-Funded Program for High-Risk Four-Year-Olds should be continued, and a concerted effort made to secure increased funding so that more at-risk four-year-olds can be served.
- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. In order to facilitate this, as well as other longitudinal studies, it is strongly recommended that a student identification and information system be implemented statewide so that the impact of all monies directed toward education can be more accurately measured.

APPENDIX

LOUISIANA DEPARTMENT OF EDUCATION
1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS

FOLLOW-UP STUDY OF FORMER PROGRAM PARTICIPANTS

I. To be completed by PROJECT DIRECTOR

Please complete Part I for each student who participated in the State-Funded Program for High-Risk Four-Year-Olds (formerly termed the Early Childhood Development Program) between 1984 and 1990, and forward this form to the child's current K-5 teacher for completion of Part II. Please collect and return the completed forms to the Department no later than December 15, 1990.

_____ School System

_____ Student's Name (Last, First, Middle)

_____ Present School

_____ Present Teacher

84-85 85-86 86-87 87-88 88-89 89-90
Year of Participation (Circle one.)

pre-k k k/1 1 1/2 2 3 4 5
Present Grade Level (Circle One.)

II. To be completed by PRESENT TEACHER (K-5): Please complete Part II for the student named above and return this form to the Project Director.

A. 1. Student birthdate (month/day/year) _____

2. Student Sex (M or F)____

3. Student race (Check one.)

__Black __White __Hispanic __Asian __Native Amer. __Other

4. Special services received by this student since participation in program (Check all that apply.)

a. Special Education ____ c. Chapter 2 _____

b. Chapter 1 ____ d. Other (Name _____)

5. If this child has spent any time in a transition class, please indicate the class level(s) involved. (Check all that apply.)

a. Pre-K ____ b. K/1 ____ c. 1/2 ____ d. Other ____

6. If this child has been retained since program participation, please indicate the grade the child repeated or is repeating. (Check all that apply.)

a. K____ b. 1____ c. 2____ d. 3____ e. 4____

7. How would you rate the level of classroom participation of this child's parents relative to that of the parents of other children in your class? (Check one.)

a. ___More b. ___Same c. ___Less d. ___Don't know

B. Please use the following scale of indicators to assess the performance of the student identified above in comparison with the average performance of other children in the same class.

1 = above class average
2 = on line with class average
3 = slightly below class average
4 = unsatisfactory

CIRCLE the number that is closest to your assessment of the child's performance in each of the developmental areas identified below:

	above class average	on line with class average	slightly below class average	unsatisfactory
COGNITIVE DEVELOPMENT	1	2	3	4
DEGREE OF INDEPENDENCE	1	2	3	4
SOCIAL DEVELOPMENT	1	2	3	4
RECEPTIVE COMMUNICATION	1	2	3	4
EXPRESSIVE COMMUNICATION	1	2	3	4
FINE MOTOR DEVELOPMENT	1	2	3	4
GROSS MOTOR DEVELOPMENT	1	2	3	4

Cognitive development: counts, names, matches, recognizes, points out, recalls, etc.
Degree of independence: works on own; exhibits self-help skills in eating, dressing, toileting, grooming; exhibits self-confidence
Social development: interacts positively with other children and adults, follows directions, adapts to daily routine, accepts authority, exhibits school-appropriate behaviors
Receptive communication: uses receptive language, understands what is said
Expressive communication: uses expressive language, expresses self in language
Fine motor development: folds, cuts, draws, colors, copies, etc.
Gross motor development: moves objects, moves body, etc.

PART III

1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS EVALUATION REPORT: COMPREHENSIVE LONGITUDINAL REPORT

Prepared by the

BUREAU OF EVALUATION
OFFICE OF RESEARCH AND DEVELOPMENT
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1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS
COMPOSITE EXECUTIVE SUMMARY

EVALUATION REPORT I. PROGRAM DESCRIPTION REPORT
EVALUATION REPORT II. FOLLOW-UP STUDY REPORT
EVALUATION REPORT III. COMPREHENSIVE LONGITUDINAL REPORT

INTRODUCTION

The State-Funded Program for High-Risk Four-Year-Olds was initiated as a pilot project through Act 619 of the 1984 Legislative Session. Since the 1984-85 school year, the program has expanded from 10 participating Local Education Agencies (LEAs) serving 315 children, to 63 of the 66 LEAs, serving 1751 children. Initially funded at $300,000 during 1984-85, the 1990-91 program was funded through a combination of State and Quality Education Trust Fund 8(g) monies in the amount of $3,501,500. A total of 8945 children have been served by the program since its inception. The purpose of the program is to improve the readiness of preschool-aged children who are eligible to enter kindergarten the following year and who are at risk of being insufficiently ready for the regular school program.

Since the initial 1984-85 program year, the Bureau of Evaluation, at the request of the Bureau of Elementary Education, has prepared comprehensive evaluation reports assessing the impact and effectiveness of the State-Funded Program for High-Risk Four-Year-Olds. The present report is Part III of the three-part 1990-91 evaluation report series. Part I provided a comprehensive program description, while Part II focused on follow-up study findings. Part III, which follows this composite executive summary, provides classroom observation findings, as well as the results of a comprehensive longitudinal study assessing sustained program effects on former participants as measured by state test results. Copies of all three reports are available from the Bureau of Evaluation in the Louisiana Department of Education.

EVALUATION REPORT I. PROGRAM DESCRIPTION REPORT FINDINGS

As presented in the 1990-91 Program Description Report, on the basis of annual family income levels below $15,000, a minimum of 33% (25,643) of the four-year-old population in Louisiana was considered to be at risk during the 1990-91 school year. Of this number, 6.8% (1751) were served by the State-Funded Program for High-Risk Four-Year-Olds. Head Start provided services to 41.5% (10,645) during that period; 16.6% (4264) were served by Chapter 1; 8.1% (2065) received services through Special Education programs; and 0.4% (103) were served by other programs. Overall, 73.4% (18,828) of the 25,643 four-year-olds identified as at risk in Louisiana received some type of intervention during the 1990-91

school year. However, 26.6% (6815) remained unserved during this period. In view of the fact that the 25,643 figure is a very conservative estimate of the at-risk four-year-old population, the 6815 children that remained unserved also becomes a conservative estimate of the actual number still in need of such intervention.

Demographic information relative to the 1990-91 program indicated that 68% of the four-year-old participants were black and 30% were white, with the remaining 2% being of other origins. All participating families had incomes below $15,000, with 72% being under $10,000. The principal wage earners were most often unemployed (among 45% of the families) or unskilled laborers (among 35%). Program teachers were most often certified in nursery school (among 50%) or kindergarten (38%). The remaining number were working under special conditions.

State per-pupil allocations for the 1990-91 program averaged $2056 for full-day programs, and $977 for half-day programs. The average hourly cost of providing services to each child was found to be $1.90. The conclusions and recommendations reached in this report are combined with those from Parts II and III, and presented at the end of this composite summary.

EVALUATION REPORT II. FOLLOW-UP STUDY REPORT FINDINGS

The second report in the three-part 1990-91 series focused on both the grade-level progression and the 1990-91 classroom performance of former participants in the State-Funded Program for High-Risk Four-Year-Olds. In the absence of statewide identification numbers assigned to each student in the public schools in Louisiana, local systems were able to submit grade placement data for 56% of the total number of students who had participated in the program since its 1984-85 inception.

Among this number of program graduates enrolled in pre-kindergarten through fifth grade during 1990-91, 78% were found to be on grade level in terms of their progression through school. When compared with their present peers, between 61% and 98% of these former program participants were rated by their present pre-kindergarten through fifth grade teachers as being on line with, or slightly above class average, in each of the seven developmental areas addressed by the program. The developmental area in which these students were most consistently given high ratings was that of gross motor skills. The conclusions and recommendations reached in this report are presented at the end of this composite summary.

EVALUATION REPORT III. COMPREHENSIVE LONGITUDINAL REPORT FINDINGS

The third component of the overall evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds examined the

instructional techniques and methodologies in use in local programs in terms of their developmental appropriateness as defined by the nationally-recognized Early Childhood Environment Rating Scale. Secondly, it provided a longitudinal view of the sustained effects of the program as measured by the performance of former participants on the Louisiana Educational Assessment Program tests at grades 3, 4, and 5.

Structured classroom observations of local programs yielded consistently good ratings across all categories identified on the Early Childhood Environment Rating Scale. Based on a benchmark rating of 5 (indicative of "good" on the instrument scale of 1 to 7), 25 of the 29 items on the instrument received mean ratings above 5. These results indicated that developmentally-appropriate techniques and methodologies were in use in local programs.

The sustained effects of the program were examined in terms of the performance of former participants on the grades 3 and 5 criterion-referenced tests, as well as on the grade 4 norm-referenced test (the California Achievement Test or CAT). Again, the absence of statewide student identification numbers for matching former participants with their individual LEAP test results had a significant effect on the number of program graduates for whom such results could be obtained.

On the grade 3 LEAP test in mathematics, the mean score among former program participants was lower than that of the population as a whole, but a higher percentage of the former participants attained the performance standard in that area. In language arts, the mean scores among former program participants and the population as a whole were the same, but, in this instance, a lower percentage of the former participants attained the performance standard.

On the grade 5 mathematics LEAP examination, while the mean scores among former program participants and the population as a whole were the same, a higher percentage of the former participants attained the performance standard in that area. In language arts, the mean scores among former program participants and the population as a whole were the same, but a higher percentage of the former participants attained the performance standard in that area.

As assessed by CAT results at grade 4, the mathematics, reading, language arts, and total test battery mean scores among former program participants were the same as those for the grade 4 population as a whole. On all components of the grade 4 CAT, while a lower percentage of the former program participants scored in Quarter 4 than was recorded among the entire population tested, the percentage of former participants who scored in Quarter 1 was also lower than that observed for the population. The conclusions and recommendations reached in this report are presented at the end of this composite summary.

CONCLUSIONS

The composite conclusions reached with respect to the comprehensive evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds as presented in the Program Description Report, the Follow-Up Study Report, and the Comprehensive Longitudinal Report are summarized below:

- The 1990-91 State-Funded Program for High-Risk Four-Year-Olds is reaching its targeted population of at-risk four-year-olds. Although capable of serving only 6.8% of that population, when combined with all other service providers, 73.4% of the at-risk four-year-olds are being served, but 26.6% remain unserved and thus still at risk of being insufficiently ready for the regular school program.

- Participating LEA's are in compliance with Department of Education regulations concerning program implementation.

- Access to accurate, timely, and complete evaluation data, particularly those of a longitudinal nature, continues to be a problem.

- As evidenced by grade-level progression and subsequent classroom performance data relative to program graduates, the State-Funded Program for High-Risk Four-Year-Olds is having a positive impact on the children who were served.

- Based on the results of the structured observations of individual classrooms, local programs are providing developmentally-appropriate classroom settings, instructional techniques, and teaching methodologies.

- Based on the 1990-91 grade 3 LEAP scores, former participants in the State-Funded Program for High-Risk Four-Year-Olds generally performed as well as the entire grade 3 population tested in both mathematics and language arts.

- Based on the 1990-91 grade 5 LEAP scores, former participants in the State-Funded Program for High-Risk Four-Year-Olds generally performed as well as the entire grade 5 population tested in both mathematics and language arts.

- Based on the 1990-91 grade 4 LEAP scores on the CAT, former participants in the State-Funded Program for High-Risk Four-Year-Olds generally performed as well as the entire grade 4 population tested in all areas tested.

RECOMMENDATIONS

The composite recommendations offered as a result of the comprehensive evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds as presented in the Program Description Report, the Follow-Up Study Report, and the Comprehensive Longitudinal Report are summarized below:

- The State-Funded Program for High-Risk Four-Year-Olds should be expanded so that, eventually, every at-risk four-year-old in Louisiana will have access to some type of preschool program. Increased coordination among all available service providers is a necessity in order to accomplish this goal.

- Increased attention must be directed toward the provision of accurate, timely, and complete data by local project personnel as the basis for assessing the impact and effectiveness of the program, and, subsequently, for informing decisions related to its implementation.

- Efforts should continue to be targeted toward the provision of developmentally-appropriate settings, instructional techniques, and methodologies inherent in good early childhood programs.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates.

- In order to facilitate access to accurate, complete longitudinal data, all pertinent project data collection activities should be coordinated with such requests made by both the Student Information System (SIS) and LEAP, so that, eventually, these two statewide databases will serve as the sources of virtually all student-specific information for longitudinal studies of program impact and effectiveness.

1

INTRODUCTION

The present document is the third part of the three-part state program evaluation report for the State-Funded Program for High-Risk Four-Year-Olds for the 1990-91 school year. The purpose of the program is to improve the readiness of preschool-aged children for success in school. The target population includes children who are eligible to enter kindergarten the following year and who are statistically at risk of being insufficiently ready for the regular school program.

Background

The State-Funded Program for High-Risk Four-Year-Olds was begun in 1984 with the enactment of Act 619 by the Louisiana Legislature. This statute provided ten $30,000 grants for pre-kindergarten pilot projects designed to enhance the readiness of participants to be successful in the regular school program. The first classes were offered during the 1984-85 school year. Act 323, enacted by the 1985 legislature, extended the initial pilot effort by authorizing annual funding of these early childhood projects.

Except for the 1987-88 school year, when budgetary constraints caused the program to be limited to ongoing projects, the numbers of classes, the numbers of participating local education agencies (LEAs), and the numbers of participating children have increased

each year. A summary table tracking program growth is provided in Appendix I. By 1990-91, 63 of the 66 LEAs in the state provided one or more classes.

Since its inception, the State-Funded Program for High-Risk Four-Year-Olds has been evaluated on an annual basis by the Bureau of Evaluation within the Office of Research and Development. A list of all of the state program evaluation reports prepared by the Bureau is provided in Appendix II. These reports have been used as a basis for decision making relative to program improvement and expansion.

As the opportunities for more of the eligible children to participate have been expanded, so has the scale of allocation to fund the program. Since the initial $300,000 allocation in 1984, the funding has been increased each year, except for 1987-88 when a funding freeze was in effect. Beginning in 1988-89, the State Board of Elementary and Secondary Education (BESE) has annually allocated Louisiana Quality Education Support Fund 8(g) funds for the program. By 1990-91 the allocation for the State-Funded Program for High-Risk Four-Year-Olds had increased to $3,501,500, including $1,501,500 from the state general fund and $2,000,000 from 8(g) funds.

Annual state-level evaluation reports have been systematically used as an information base to facilitate the conversion of program guidelines into regulations and to direct attention to program improvement needs and opportunities. Copies of the current

regulations are on file in the Bureau of Elementary Education and are also included in Part I of the 1990-91 evaluation report.

The original program guidelines were developed and implemented for the 1984-85 pilot projects. These guidelines set forth general program requirements designed to allow considerable flexibility for the LEAs to meet their individually-identified needs. The findings of the 1984-85 state-level evaluation were used to refine the guidelines, to identify effective practices, and, where necessary, to redirect efforts for the 1985-86 school year. These 1985-86, second-generation, guidelines provided participants with an overall framework within which to structure and operate both the new and the ongoing projects.

The first year of the program (1984-85) local school systems were invited to compete for a statewide total of ten projects. In keeping with the guidelines, one project was funded in each of the eight Congressional districts, and two were awarded from among the proposals submitted from across the state as a whole. The following year (1985-86) Act 323 stipulated that each local school system would be eligible for the funding of at least one project. The number of allowable projects per school system was in keeping with the total student population of the system the previous year.

In addition to expanding the number of projects involved in the program for 1985-86, changes were also made in the eligibility guidelines for that year. The 1984-85 target population had included children who were at least age four by December 31, 1984. Consequently, due to the pilot nature of the original project, in

addition to the targeted four-year-olds, some of the first-year participants were age three, and some were age five. Beginning in 1985-86, however, the target population included children who would be eligible to enter kindergarten the following year, who were at risk of being insufficiently ready for the regular school program, and who had not been identified as eligible for special education services. These requirements narrowed the age range to include only four-year-olds.

Additionally, since the statewide implementation of the program during the 1985-86 school year, the Department of Education has issued guidelines that require that local school systems employ teachers certified in nursery school, early childhood, or kindergarten education for these projects, that the pupil/teacher ratio not exceed 20:1 (with the assistance of a full-time aide) or 15:1 (without an aide), and that systems operate full-day programs, when possible.

In 1988-89 the State Board of Elementary Education (BESE) issued the first, "Regulations for State-Funded Programs for High-Risk Four-Year-Olds." Revisions have been made in the regulations since that time, as warranted by the evaluation findings. Guidelines have continued to evolve to augment the pertinent statute (Act 323, La.R.S. 17:24.7) and program regulations. (Copies of the statewide evaluation reports, guidelines, and regulations are available for review in the Bureau of Elementary Education. The May 1989 Interim Evaluation Report reviews both the guideline changes and the impact findings prior to 1989-90.)

Purpose of the Evaluation

Part III of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report is designed to assess the scope and extent to which the developmental approach to early childhood education is being implemented in project classrooms. It is also intended to examine the sustained effects of the program on the academic achievement of former program participants.

The purpose of the overall state evaluation is to provide information to the responsible decision makers at the state and local levels regarding the extent to which program goals are met. The state evaluation report information is also designed to identify areas in which modifications in the operation and administration of the program may be needed. The report supplements local project evaluations with a view toward assisting decision making about both the continuation and modification of ongoing projects, as well as the relative merits associated with the implementation of new projects.

Evaluation Questions

This comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds focuses on classroom instruction and the longitudinal impact of the program on former participants who are now in third, fourth and fifth grades. The instructional components were examined in terms of adherence to the developmental approach. The performance of the 1984-85, 1985-86 and 1986-87 program participants on the grade 3, grade 4 and grade

5 Louisiana Educational Assessment Program (LEAP) tests was compared with the performance of the total populations of grade 3, grade 4 and grade 5 students taking these tests. The questions addressed in this comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds include the following:

1. What instructional techniques and methodologies were observed to be in use in local programs for high-risk four-year-olds, and to what extent do these reflect the developmental philosophy inherent in early childhood education?
2. What is the impact of the State-Funded Program for High-Risk Four-Year-Olds on the performance of program "graduates" now enrolled in third, fourth and fifth grades, as assessed by the Louisiana Educational Assessment Program?

Evaluation Audiences

The following are the major audiences for the evaluation and are considered legitimate recipients of evaluation reports:

- The State Superintendent of Education and his Cabinet
- The State Board of Elementary and Secondary Education
- Members of the House and Senate Education Committees of the Louisiana Legislature

- The State Department of Education Office of Academic Programs and Bureau of Elementary Education
- Administrators of local State-Funded Programs for High-Risk Four-Year-Olds

2

METHODOLOGY

The methodology chapter of the present report focuses on the identification of the sources of information used in the study, the provision of descriptions of the instruments employed, and the delineation of procedures implemented in the analysis of the data collected. This chapter will be followed by a presentation of the findings, conclusions, and recommendations.

Data Sources

The comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds is both qualitative and quantitative in nature. To address the previously cited evaluation questions, data were collected from the following sources:

- State level evaluation reports, 1986-1991
- Early Childhood Environment Rating Scale (Harms and Clifford)
- Project site visits/notes
- Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Participants form
- The Grade 3, 4, and 5 Louisiana Educational Assessment Program test results

A copy of the instrument unique to this component of the overall evaluation can be found in Appendix III.

Description of Instruments

Part III information collection procedures use the Early Childhood Environmental Rating Scale in classroom observations to determine the scope and extent to which the developmental approach to early childhood education is implemented by project teachers. The Early Childhood Environment Rating Scale was initially developed by Harms and Clifford (1980), but modified in several areas to address more specifically the population involved in the program. The instrument, as adapted for this evaluation, focuses on the areas of Personal Care Routines (three items), Furnishings and Display for Children (four items), Language-Reasoning Experiences (four items), Fine and Gross Motor Activities (five items), Creative Activities (seven items), Social Development (four items), Adults (one item) and Classroom Management (one item).

For each of the 29 items, the observer is to assign a rating within the range of one to seven points. Benchmark characteristics are designated at the odd-numbered intervals with 1=inadequate, 3=minimal, 5=good, and 7=excellent. The assignment of any odd-numbered rating to a particular item means that all criteria described relative to that specific rating, as well as those described relative to ratings below that selected value, were met. For example, a rating of "5" assigned to a particular item means that all criteria described relative to the ratings of "1" and "3," as well as those associated with the "5" rating, were met. Even-numbered ratings are also allowed; they represent the presence of all criteria described within the preceding odd-numbered ratings,

as well as a portion, but not all, of the criteria contained in the succeeding odd-numbered category.

The principles used in the selection of observation sites varied across the years. For example, during 1984-85, 1986-87, 1988-89, and 1989-90, observations were made of all classes. In 1985-86 and 1987-88, only new sites, new teachers and/or problem situations were observed. During 1990-91, new sites, new teachers and/or problem situations, as well as half the remaining program sites were visited. These differences in site-selection criteria resulted in expected variations in the yearly classroom observation data relative to the specified program sites. These variations, along with those created by program implementation under evolving guidelines and/or regulations, make longitudinal comparisons among classes operating under these differing circumstances problematic.

The 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants instrument was adapted from the Statewide Evaluation of Early Education Programs for Handicapped Children in Louisiana: 1985-86 Questionnaire/Interview, Kindergarten Teachers, Anderson and Bower (1985). The adapted instrument was designed to determine grade-level placement, to assess classroom performance and to facilitate identification of former participants in the Louisiana Educational Assessment Program (LEAP) data. Information obtained from the instrument was used to locate former participants on the LEAP data tapes so that their performance could subsequently be assessed.

The LEAP grade 4 norm-referenced testing (NRT) instrument is the California Achievement Test (CAT). Other versions of the CAT are administered at grades 6 and 9, as part of the LEAP. The test at each level is normed using a nationwide population sample. The LEAP grade 3 and 5 criterion-referenced tests (CRTs), on the other hand, are based upon state curriculum standards. Additional CRTs are administered statewide at grades 7, 10 and 11, with the grade 10/11 tests serving as the graduation exit examination.

Evaluation Procedures

Part III of the 1990-91 state program evaluation report is based in part upon classroom observations using criteria that define the developmental approach to early childhood education. These criteria are an integral part of the Early Childhood Environmental Rating Scale. State Department of Education staff in the Early Childhood Section of the Bureau of Elementary Education are systematically trained in the use of the observation scale and periodically assess the inter-rater reliability of independent observers of the same classroom. As previously noted, changes in statutes, guidelines, and/or regulations establish different pools from which participants are selected. Similarly, some adaptations have been made in the observation instrument to make it, in the judgement of responsible staff members, more closely reflect the developmental approach in the state implementation context.

The report also seeks to assess program impact indicators as they occur in terms of grade-level progression (Part II of the

1990-91 report) and standardized test scores of former program participants. Both of these impact indicators are constricted by the inability of all participating local school systems to follow-up all former students after they leave the program. The student academic achievement impact assessment uses test scores of former program participants from the Louisiana Educational Assessment Program (LEAP) annual test result reports.

Data Analysis Procedures

The data compiled from the Early Childhood Environment Rating Scale Tally Sheet, through the use of the Early Childhood Environment Rating Scale, are largely descriptive in nature. The data are reported in the form of frequencies and percentages relative to each item observed. State level mean scores, score ranges, modes, and standard deviations are also provided for each item. Aggregate means, ranges, modes, and standard deviations are shown for each of the eight major categories identified within the scale.

The data compiled from the test scores of former program participants are reported by mean scores, score ranges, and standard deviations. The data are shown in the form of frequencies and percentages relative to each subject area and grade level. The statistical significance of differences between the means for the entire population tested and those for the former program participants was computed at each of the grade levels examined.

Information obtained from the Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Old Follow-Up Study of Former Program Participants was used to locate, and, subsequently, to assess the performance of former program participants in grades 3, 4 and 5, as evidenced by their scores on the Louisiana Educational Assessment Program tests. The results of a comparison of former program participants who were found to be in third through fifth grade, with the total grade 3, 4, and 5 student populations tested are presented in this report. Further LEAP information is available from the Bureau of Pupil Accountability, Office of Research and Development, Louisiana Department of Education.

The analysis of LEAP results was conducted through the use of a Z-test. The Z-test uses Z-scores to compare the two means on the basis of a normal curve distribution. A Z-score gives the position of a specific score in relation to the mean of the distribution, using the standard deviation as the unit of measurement. In other words, it denotes the number of standard deviations that a particular score lies above or below the mean of the distribution.

The 0.05 level of significance was selected as the basis for determining whether any observed differences between the performance of former program participants and that of the entire population of grade 3 students tested were "real" differences, or whether they could be attributed to chance. In order to be considered statistically significant, the observed difference must be shown to have a 5% or less probability of occurrence by chance

alone, or a 95% chance of having occurred as a result of some attributable cause.

Two separate, one-sample, two-tailed Z-tests were used to compare the performance of former program participants with that of the entire population of grade 3 students tested. One Z-test was employed relative to the mathematics scores and one with respect to the language arts scores. This procedure was repeated in the analysis of the grade 5 CRT scores, as well as that involving the grade 4 CAT.

Certain limitations in the conclusiveness of the Z-score findings should be noted. Because of the attrition in the numbers of former program participants for whom LEAP scores are available, sometimes the numbers of individuals used in computing the Z-score is quite small. As a result, the group mean may be disproportionately impacted by a very small number of individuals at either end of the score range, and thus leave erroneous impressions. This factor will be pointed out as instances arise in the interpretation of findings.

A further limitation related to the Z-score analysis stems from the Z-score tables used to determine statistical significance. The table provides referents for whole numbers only. As a result, potentially useful information may be lost in the course of rounding off test scores to the nearest whole numbers for conversion. In view of these conditions, data are analyzed using both the Z-test and a comparison of mean scores. These results are

provided with respect to both the language arts and mathematics scores on the grade 3 and 5 LEAP tests.

Finally, it should be noted that previously-cited changes in guidelines, regulations, and practices have been made over the years in an effort to improve the program. As a result of such changes, the classes for 1984-85, for example, are not necessarily comparable to those of other years with respect to the age of the participants, nor are participants in the later program implementation years totally comparable to those in earlier years due to the down-scaling of the income-eligibility criterion. Such changes often resulted in the enrollment of participant groups with varying degrees of at-risk characteristics. As is often the case in evaluation studies, the absence of stringent controls on the subjects involved necessitates that cautions be considered in reviewing the findings. Any such cautions that should be taken into account when interpreting the study findings will be noted at the appropriate times in the report.

3

PRESENTATION OF THE DATA AND DISCUSSION OF THE RESULTS

Introduction

The data collected in this evaluation of the State-Funded Program for High-Risk Four-Year-Olds were gathered from classroom observation scales completed by Bureau of Elementary Education staff, from follow-up study forms completed by project directors and teachers in systems involved in the program, and from test results from the Louisiana Educational Assessment Program. The results obtained from the aggregation of these data are organized with respect to the two major evaluation questions addressed.

Evaluation Question 1: What instructional techniques and methodologies were observed to be in use in local programs for high-risk four-year-olds, and to what extent do these reflect the developmental philosophy inherent in early childhood education?

Early Childhood Environment Rating Scale Results

Detailed state-level data relative to each item addressed on the Early Childhood Environment Rating Scale are presented in Appendix IV. Frequencies indicative of each numerical rating, as well as means, ranges, modes, and standard deviations are provided. Aggregate data relative to the eight categorical groupings of items are presented and discussed in this chapter.

Observations were made in 59 sites during the 1990-91 school year by trained State Department of Education staff members. Using the rating scale, the observers rated each of the 29 items that are grouped in eight categories. Ratings were assigned within a range of one to seven points: inadequate (1 point), minimal (3 points), good (5 points), and excellent (7 points). The assignment of any

odd-numbered rating to a particular item means that all criteria for that rating, as well as those described relative to ratings below that selected value, were met. The rating of 5 (indicative of "good" on the scale) was used as the benchmark against which the individual item means were judged.

A summary of the results compiled from the Early Childhood Environment Rating Scale is presented in Table I. As shown in the table, Informal Use of Language (Item 11) received the highest mean score (5.73). Art (Item 17), received the lowest mean score 4.54. In addition to the item-by-item data illustrated in the table, a composite view of each of the seven major categories of the rating scale is provided.

Using the composite means shown in Table I, a percentage score based on the maximum allowable for each category was computed as an indication of the relative assessments given to items in that category. Both the composite category and percentage scores are illustrated in Table II.

In the Personal Care Routines category, the maximum overall score that could have been awarded was 21 points. The reported mean of 16.68 thus represents an assigned score that is 79% of the maximum. Similarly, the score for the Furnishings and Display for Children category is 77% of the maximum possible, while that for Language-Reasoning Experiences is 79%. A rating of 78% of the maximum total was reported for Fine and Gross Motor Activities; that for Creative Activities was 75% of the maximum. The percentages for the Social Development and Adult categories were

73% and 77%, respectively. For Classroom Management, the new category added to the instrument in 1989-90, the mean score computed was 77% of the maximum score.

From an examination of these data it can be seen that relatively consistent ratings were recorded across all eight categories. The Personal Care Routines and the Language-Reasoning Experiences categories received the highest ratings (79% of the maximum), while the Social Development category received the lowest (73% of the maximum).

On the basis of the findings reported in Tables I and II, and detailed in Appendix IV, it is concluded that instructional techniques and methodologies consistent with the developmental philosophy of early childhood education were applied in the observed project classes. Measured against the benchmark rating of 5 (indicative of "good" on the scale), all but 4 of the 29 items met that criterion for developmental appropriateness.

TABLE I. SUMMARY OF 1990-91 EARLY CHILDHOOD ENVIRONMENT RATING SCALE RESULTS BY ITEM

ITEM	N*	MEAN	RANGE	MODE	STD
I. Personal Care Routines					
1. Greeting/departing	59	5.68	4-7	5	0.94
2. Meals/snacks	59	5.44	3-7	5	0.88
3. Nap/rest	56	5.55	5-7	5	0.81
Total (Max = 21):	56	16.68	13-21	--	2.00
II. Furnishings & Display for Children					
4. For learning activities	59	5.54	4-7	5	1.00
5. For relaxation and comfort	59	5.49	4-7	5	0.88
6. Room arrangement	59	5.29	2-7	5	1.00
7. Child related display	59	5.20	3-7	4	1.20
Total (Max = 28):	59	21.53	16-28	--	3.28
III. Language-Reasoning Experiences					
8. Understanding of language	59	5.60	4-7	5	0.84
9. Using language (expressive)	59	5.61	4-7	5	0.87
10. Using learning concepts (reasoning)	59	5.34	3-7	5	1.10
11. Informal use of language	59	5.73	1-7	5	1.23
Total (Max = 28):	59	22.24	14-28	--	3.41
IV. Fine & Gross Motor Activities					
12. Perceptual/fine motor	59	5.42	3-7	5	1.00
13. Supervision (fine motor)	57	5.26	3-7	5	0.88
14. Space for gross motor activities	59	5.47	1-7	5	1.19
15. Gross motor equipment	59	5.49	2-7	5	1.09
16. Scheduled time for gross motor	59	5.64	4-7	5	0.91
Total (Max = 35):	57	27.40	19-35	--	3.75

*N = number of projects (classes) rated

Table I cont'd

ITEM	N*	MEAN	RANGE	MODE	STD
V. Creative Activities					
17. Art	59	4.54	1-7	4	1.52
18. Music/movement	59	5.31	3-7	5	0.88
19. Blocks	59	5.44	3-7	5	1.04
20. Sand/water	59	5.53	3-7	5	1.18
21. Dramatic play	59	4.95	3-7	5	1.11
22. Schedule	59	5.42	4-7	5	0.88
23. Supervision (creative activities)	59	5.71	4-7	5	0.85
Total (Max = 49):	59	36.90	25-48	--	5.52
VI. Social Development					
24. Free play	59	5.36	3-7	5	1.04
25. Group time	59	4.81	3-7	4	0.99
26. Cultural awareness	59	4.68	2-7	4	0.99
27. Tone	59	5.63	2-7	5	1.23
Total (Max = 28):	59	20.47	13-28	--	3.25
VII. Adults					
28. Provisions for parents	59	5.39	4-7	5	0.91
Total (Max = 7):	59	5.39	4-7	--	0.91
VIII. Classroom Management					
29. Classroom management	59	5.36	2-7	5	1.20
Total (Max = 7)	59	5.36	2-7	--	1.20

*N = number of projects (classes) rated

TABLE II. EARLY CHILDHOOD ENVIRONMENT RATING SCALE PERCENT OF POSSIBLE MAXIMUM SCORE BY CATEGORY

Category	Items Per Category	Maximum Category Score	Number of Projects Rated	Mean Category Score	Percent of Maximum
I. Personal Care Routines	3	21	56	16.68	79
II. Furnishings & Display for Children	4	28	59	21.53	77
III. Language-Reasoning Experiences	4	28	59	22.24	79
IV. Fine & Gross Motor Activities	5	35	57	27.40	78
V. Creative Activities	7	49	59	36.90	75
VI. Social Development	4	28	59	20.47	73
VII. Adults	1	7	59	5.39	77
VIII. Classroom Management	1	7	59	5.36	77

Evaluation Question 2: What is the impact of the program on the performance of program "graduates" now enrolled in third, fourth and fifth grades, as assessed by the Louisiana Educational Assessment Program?

Background

In order to assess the impact of the State-Funded Program for High-Risk Four-Year-Olds on the performance of former participants, data were drawn from the 1990-91 grades 3, 4, and 5 LEAP test results. Current school and grade enrollment data relative to former participants were provided by local project directors through completion of the Louisiana Department of Education 1990-91 State-Funded Program for High-Risk Four-Year-Olds Follow-Up Study of Former Program Participants form. (Aggregate data collected through the use of this form were reported in Part II of the overall program evaluation report.)

Student names, birthdates, and enrollment information obtained from the Follow-Up Study form were used to extract the grades 3, 4, and 5 LEAP scores for these program students for comparisons with the entire populations of students tested at the three levels. However, due to the absence of statewide identification numbers for Louisiana students, the percentages for whom Follow-Up Study data were submitted, and, consequently, for whom LEAP results could be obtained, were limited by the extent to which each local system was able to track its former program participants, both within, and outside of, its district boundaries. While steps are currently being taken to facilitate the statewide tracking of program participants through the Student Information System (SIS), in the future the availability of current longitudinal data remains

heavily dependent upon the efforts of local systems. Until the SIS has been in place for several years, such will continue to be the case.

Comparison of Third Grade Test Scores

The performance of third grade students throughout Louisiana is assessed by means of a criterion-referenced test (CRT) that is part of the Louisiana Educational Assessment Program (LEAP). This test is designed to assess student performance in language arts and mathematics based on grade-appropriate standards as defined in the pertinent Louisiana state curriculum guides.

In order to determine the impact of the program on the 1990-91 third grade students who are program "graduates", the mean scores and standard deviations for these former program participants were computed relative to both areas of the grade 3 LEAP test. The group means and standard deviations for the children who had been in the program were compared to the means and standard deviations computed for the total population of Louisiana regular-education third graders. As described earlier, the "Z-test" was used to determine whether the performance of the former program participants was comparable to, or significantly different from, that of the entire grade 3 student population tested.

Third grade LEAP test scores were available for 58,659 students in mathematics and for 58,889 in language arts. Of the 1,272 students who had participated in the program during the 1986-87 school year and could have progressed to grade 3 in 1990-91, as well as the numbers who had been involved in 1984-85 and 1985-86

programs who could have been retained since that time and progressed to grade 3 by 1990-91, mathematics test scores were available for 537 students, and grade 3 language arts scores were available for 535 students.

Mathematics, grade 3 test scores. The 1990-91 former participants and population means, along with the numbers tested, standard deviations and score ranges on the mathematics component of the LEAP test, are presented in Table IIIA. Test data for 1989-90 are also presented for comparison purposes.

As illustrated, the mean for the population (all students tested) was 364, while the mean for former program participants was 363. Standard deviations were 10.05 and 9.89, respectively. The range of scores was 308 to 396 for the total grade 3 population tested, and 331 to 396 for former program participants. The Z-score computed relative to these two means was -2.33. The negative value of the Z-score indicates that the mean computed among former participants was lower than that for the population as a whole. Based on the 0.05 level set as the minimum significance level, the two-tailed equivalence (0.025) on the Z table is 1.96. Since the absolute value of the computed Z-score of -2.33 (2.33) is now greater than the table equivalence score of 1.96, and a p value of 0.02 was computed, this indicates that the observed difference between the former participant group mean and that for the population as a whole is statistically significant. Taking into account the sign of the Z-score, these results indicate that the former program students for whom test data were available under-

performed the population as a whole in mathematics at a level that is statistically significant.

Among the program participants tested in 1989-90, the converse was the case. The 1989-90 LEAP mathematics results indicated that the former participants tested at that time out-performed the grade 3 population as a whole at a statistically significant level ($p = 0.0004$). However, as mentioned earlier, caution must be exercised in comparing the results across the two years.

TABLE IIIA. COMPARISON OF GRADE 3 MATHEMATICS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR-EDUCATION STUDENTS TESTED

Third Grade Student Group	Year	N	Mean	SD	Range	Z	P
All Students Tested	1990-91	58,659	364	10.05	308-396		
	1989-90	58,820	363	9.80	300-397		
Former Program Participants Tested	1990-91	537	363	9.89	331-396	-2.33	0.02*
	1989-90	293	365	7.99	340-397	3.50	0.0004*

*$p < 0.05$

As discussed in the "Data Analysis Procedures" section of the present report, in the analysis and interpretation of study results, no statistic should be viewed alone. Such is the case with respect to the Z-score analysis. While the Z-test results for 1990-91 indicate that the program participants significantly under-performed the grade 3 population tested, and the 1989-90 results reflected the opposite results, the reality is that the means for the entire populations tested and that among former program participants differed very little each year: 364 to 363 for 1990-91, and 363 to 365 for 1989-90, respectively. Additionally, over the past year on the grade 3 mathematics test, the mean for the entire population increased by one (363 to 364), while that for the former program participants decreased by two (365 to 363). Thus, while the Z-score statistic indicates that former program participants significantly under-performed the population in 1990-91, and out-performed the 1989-90 population, the practical significance of this finding can only be determined in view of the total context within which the high-risk program operates. Changes in program guidelines and regulations, and, thus, in the characteristics of high-risk participants, dictate that caution be used in placing undue significance on any one statistic. Additional information, such as that concerning standard attainment rates over this two-year period (discussed later in this chapter), provide a second source of data for assessing the impact of the high-risk program on its four-year-old participants.

Language arts, grade 3 test scores. As illustrated in Table IIIB, both the population mean and the former participant mean on the 1990-91 language arts test was 358. The standard deviations relative to these two means were 12.28 and 11.77, respectively. The range of test scores was 315 to 396 for the entire grade 3 population tested, and 330 to 396 for former program participants. The Z-score computed relative to the two means was 0 with a p value of 1.0000. Since the Z-score is less than the 1.96 listed in the statistical table, the observed difference between the group and population means in this instance is not statistically significant. In other words, the high-risk children who had participated in the program achieved as well as the class as a whole in grade 3 language arts.

Similar results were seen in the previous year. While the 1990-91 population and former participant means were both 358, the comparable 1989-90 values were 358 and 359, respectively. Thus, for both 1989-90 and 1990-91, former program participants were on line with the grade 3 population tested in grade 3 language arts. However, as noted previously with respect to the mathematics results, in making judgements about program impact, this result should not be considered in isolation. Standard attainment rates, coupled with other considerations mentioned earlier, should also enter into that assessment.

TABLE IIIB. COMPARISON OF GRADE 3 LANGUAGE ARTS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Third Grade Student Group	Year	N	Mean	SD	Range	t	P
All Students Tested	1990-91 1989-90	58,889 59,042	358 358	12.28 12.19	315-396 300-396		
Former Program Participants Tested	1990-91 1989-90	535 293	358 359	11.77 10.06	330-396 335-396	0 1.41	1.0000 0.1586

Mathematics, grade 3 performance standard attainment ratio. Information on the performance standard attainment rates for both former participants and the entire population of grade 3 students tested is presented in Table IIIC. As illustrated, 90.6% of the grade 3 student population tested in 1990-91 attained the performance standard on the grade 3 mathematics test. Among the 535 former program participants tested, 91.1% attained the mathematics standard.

In comparison, 91.0% of the grade 3 population tested in 1989-90 attained the mathematics standard on the LEAP examination. The comparable attainment rate among former participants for 1989-90 was 94.5%. Thus, for both years, the standard attainment rate among former program participants on the grade 3 LEAP test in mathematics was higher than that for the entire population of grade 3 regular education students tested.

TABLE IIIC. COMPARISON OF GRADE 3 LEAP PERFORMANCE STANDARD ATTAINMENT RATES BETWEEN FORMER PROGRAM PARTICIPANTS AND ALL REGULAR EDUCATION STUDENTS TESTED

MATHEMATICS

Third Grade Student Group	Year	Number	Number Attaining Standard	Percentage Attaining Standard
All Students Tested	1990-91	58,659	53,145	90.6
	1989-90	58,820	53,526	91.0
Former Program Participants Tested	1990-91	535	487	91.1
	1989-90	293	277	94.5

LANGUAGE ARTS

Third Grade Student Group	Year	Number	Number Attaining Standard	Percentage Attaining Standard
All Students Tested	1990-91	58,889	53,118	90.2
	1989-90	59,042	52,961	89.7
Former Program Participants Tested	1990-91	535	481	89.9
	1989-90	293	278	94.9

Language arts, grade 3 standard performance attainment ratio. Scores on the 1990-91 language arts test indicate that 90.2% of the population attained the standard in that area. Among former program participants, 89.9% were successful in meeting the language arts performance standard. Thus, for 1990-91 the percentage of students who attained the specified performance standard on the language arts test was slightly lower (0.3%) among former program participants than among the total population of grade 3 students tested. Conversely, for 1989-90, the standard attainment rate among former participants was slightly higher than that of the population as a whole (94.9% to 89.7%).

Summation grade 3. In interpreting the overall significance of the test result comparisons among former program participants and the population as a whole, it is important that the unique characteristics of program participants be considered. In general, without intervention, such as that provided by the high-risk program, students identified as eligible for program participation would have been expected to perform below the level of the total population tested. Test scores for such students that are found to be near the level reported for the population as a whole would thus indicate that the intervention program has had a positive effect on the at-risk students served. While former program participants were found to under-perform the entire population of grade 3 students tested on the mathematics component of LEAP, a higher percentage attained the standard on the test (91.1% to 90.6%). The scores of the two groups in language arts, however, did not differ

significantly, although, in this case, the attainment rate among former participants was slightly lower than that among the population (89.9% to 90.2%). While a definitive cause-and-effect relationship cannot be established, the LEAP results generally indicate that, in view of the context within which it operates, the State-Funded Program for High-Risk Four-Year-Olds has had a positive impact on former participants.

Comparison of Fifth Grade Test Scores

The performance of fifth grade students throughout Louisiana is assessed by means of a criterion-referenced test (CRT) that is part of the Louisiana Educational Assessment Program (LEAP). As is the case for the grade 3 examination, this test consists of language arts and mathematics components.

In order to determine the impact of the program on the 1990-91 fifth grade students who are program "graduates", the mean scores and standard deviations for former program participants were computed relative to the Grade 5 criterion-referenced test. As was the case at grade 3, the group means and standard deviations for the children who had been in the program were compared to the means and standard deviations computed for the total population of Louisiana regular-education fifth graders. The "Z-test" was again used to determine whether the performance of the former program participants was comparable to, or significantly different from, that of the entire grade 5 student population tested. Since the initial group of program participants (those enrolled in 1984-85)

are the first to have had the opportunity to reach fifth grade, only one year of data can be provided.

In grade 5 there were 56,641 mathematics and 56,730 language arts students tested. In both grade 5 mathematics and grade 5 language arts, LEAP scores were available for 48 former program participants. Among the 315 students who had participated in the program in 1984-85, some had been involved in pull-out kindergarten programs, which were allowed during that pilot year. Others had been retained one or more times since 1984-85 and thus had not progressed to grade 5 by 1990-91.

Mathematics, grade 5 test scores. The 1990-91 results on the mathematics component of the grade 5 criterion-referenced test (CRT) are shown in Table IVA. The mean score for the entire population was 559, while that for the former program participants was 560. The standard deviations were 11.90 and 9.67 for the entire population and for the former participants, respectively; the score ranges were 507 to 598, and 542 to 589. The Z-score was 0.58 with a p value of 0.56. These results indicate that the grade 5 mathematics mean for the former program participants and the mean for the class as a whole did not differ significantly. Thus, the former program participants performed as well as the grade 5 population tested in mathematics.

Language arts, grade 5 test scores. The results on the grade 5 language arts test are presented in Table IVB. As illustrated, the 1990-91 grade 5 language arts population mean was 559, while a mean of 560 was recorded for the former participants.

TABLE IVA. COMPARISON OF GRADE 5 MATHEMATICS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Fifth Grade Student Group	N	Mean	SD	Range	Z	P
All Students Tested	56,641	559	11.90	507-598		
Former Program Participants Tested	48	560	9.67	542-589	0.58	0.56

TABLE IVB. COMPARISON OF GRADE 5 LANGUAGE ARTS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Fifth Grade Student Group	N	Mean	SD	Range	Z	P
All Students Tested	56,730	559	11.80	515-598		
Former Program Participants Tested	48	560	9.17	546-598	0.59	0.56

The standard deviations for the entire population and for the former participants, were 11.80 and 9.17, respectively; the ranges were 515 to 598, and 546 to 598, in that order. The Z-score was 0.59, with a p value of 0.56. These results indicate that there was no statistically significant difference between the grade 5 language arts mean for the former program participants and the mean for the class as a whole. Thus, as was the case in mathematics, the former program participants scored as well as the population tested in grade 5 language arts.

Performance attainment rates. In addition to the comparisons of group and population means, the grade 5 test scores were also analyzed in terms of the proportions of students who achieved the performance standard established for the test. As shown in Table IVC, while 89.1% of the 1990-91 grade 5 students in the population tested achieved the mathematics standard, 93.8% of the former program participants did so. For the language arts test, 88.4% of the entire population and 97.9% of the former participants attained the standard. From these results it can be seen that, with respect to state standards, larger proportions of the high-risk children who had been program participants attained the grade 5 mathematics and language arts standards than did the entire population of grade 5 regular-education students tested.

Summation, grade 5. In considering the overall results for the two groups of students tested at the fifth grade level, there was no statistically significant difference between the mean scores

TABLE IVC. COMPARISON OF GRADE 5 LEAP PERFORMANCE STANDARD ATTAINMENT RATES BETWEEN FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

MATHEMATICS

Fifth Grade Student Group	Number	Number Attaining Standard	Percentage Attaining Standard
All Students Tested	56,641	50,467	89.1
Former Program Participants Tested	48	45	93.8

LANGUAGE ARTS

Fifth Grade Student Group	Number	Number Attaining Standard	Percentage Attaining Standard
All Students Tested	56,730	50,149	88.4
Former Program Participants Tested	48	47	97.9

of former program participants and the overall Louisiana population of students on either the mathematics or language arts component of the Grade 5 LEAP examination. In both mathematics and language arts, the mean scores of former program participants did not differ significantly from those of the total grade 5 population tested.

Since, by usual definitions, high-risk children are not expected to attain academic achievement levels as high as other children of their age, the finding that there is no statistically significant difference between the mean scores of such students when compared to the population, indicates that some intervention has occurred to the potential benefit of the former program participants. The proportion of the grade 5 high-risk children who had been program participants and who subsequently attained the state standards, when compared with the attainment rates among the entire populations tested, further suggests that intervention has been potentially beneficial in enabling the high-risk program participants to perform as well as, or better, than the entire class in both grade 5 mathematics and language arts.

Comparison of Fourth Grade Test Scores

In the fourth grade, norm-referenced tests are administered as part of the Louisiana Educational Assessment Program (LEAP). The California Achievement Test (CAT) is used for this purpose to measure student performance in the areas of reading, language, and mathematics relative to the performance of a nationally-normed group., A composite score (total battery) combining these individual subject area scores is computed for each student. The results of the CAT score comparisons between former program participants and the total grade 4 population tested are presented in Tables VA - VE.

For those students who participated in the program in 1984-85 and completed the grade 4 CAT during 1990-91, means and standard deviations were computed relative to the areas tested - mathematics, reading, and language arts. These descriptive statistics were also computed for the total test battery. The resulting data were compared with that computed for the total population of Louisiana regular-education fourth graders. The Z-test, with a 0.05 level of significance, was used to compare the two group means. Four separate, one-sample, two-tailed Z-tests were used to compare the former participant and population means in mathematics, reading, language arts, and the total battery.

Grade 4 LEAP test scores were available for 57,193 in mathematics, 57,222 in reading, 57,190 in language arts, and 56,690 in the overall test battery. Of the 1,112 participants in the program class of 1985-86, as well as those in the 1984-85 program

who may have been retained once and who could have reached grade 4 by 1990-91, mathematics scores were available for 365, reading scores for 367, language arts scores for 365, and overall test battery scores for 364.

Mathematics, grade 4 test scores. The results for the mathematics component of the California Achievement Test are shown in Table VA. The 1990-91 mean for the entire population of students tested was 709.34, and the mean for the former program participants was 710.62. The standard deviation for the population was 35.48, while that for program participants was 30.89. The range of scores across all grade 4 students tested in mathematics was 507 to 823; that for program participants was from 552 to 799.

The Z-statistic computed for the mathematics score comparison was 0.69, with a p value of 0.4902. The criterion for significance remains such that the computed Z-score must exceed the table Z-score of 1.96 in order to indicate that statistically-significant differences exist between the two group means. The computed Z-score of 0.69 thus indicates that there was no significant difference between the mean score of the former program participants and the mean score of the class population on the fourth grade CAT in mathematics. Conversely, the previous year, the mean of the former program participants exceeded the mean of the entire group of students tested at a statistically significant level.

Reading, grade 4 test scores. Table VB illustrates the results for the two groups on the reading component of the CAT.

TABLE VA. COMPARISON OF GRADE 4 MATHEMATICS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Fourth Grade Student Group	Year	N	Mean	SD	Range	Z	P
All Students Tested	1990-91 1989-90	57,193 57,477	709.34 708.66	35.48 36.18	507-823 507-823		
Former Program Participants Tested	1990-91 1989-90	365 42	710.62 726.36	30.89 33.75	552-799 645-810	0.69 3.17	0.4902 0.016*

*$p < 0.05$

TABLE VB. COMPARISON OF GRADE 4 READING TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Fourth Grade Student Group	Year	N	Mean	SD	Range	Z	P
All Students Tested	1990-91 1989-90	57,222 57,613	687.53 687.10	41.81 42.51	537-809 537-809		
Former Program Participants Tested	1990-91 1989-90	367 43	689.13 695.67	34.60 33.35	544-797 574-761	0.73 1.32	0.4654 0.1868

The 1990-91 mean for the population was 687.53, while that for program participants was 689.13. The standard deviations were 41.81 and 34.60, respectively. The range of scores for the total population of grade 4 students tested was 537 to 809; the range for program participants was 544 to 797. The Z-score computed relative to the two means in reading was 0.73, with a p value of 0.4654. Since this does not exceed the table score of 1.96, there is no statistically significant difference ($p < 0.05$) between the two means on the fourth grade reading test. This finding indicates that the high-risk children who had been program participants, performed as well as the grade 4 class as a whole in reading.

Similar comparisons conducted between the former participant and population means in 1989-90 yielded comparable results. As is the case for 1990-91, the 1989-90 groups did not differ significantly in their grade 4 CAT reading performance.

Language arts, grade 4 scores. The language arts results, as reported in Table VC, show a mean of 687.78 with a standard deviation of 38.88 for the entire grade 4 population tested, and a mean of 690.51 with a standard deviation of 29.97 for former program participants. The population range for language arts was 518 to 796, while that for program participants was 540 to 769. The Z-test for the two means relative to language arts yielded a test statistic of 1.34, which does not exceed the required table score of 1.96. Consequently, it can be concluded that there is no significant difference between the means of the two groups in language arts. The performance of program participants was not

significantly different ($p < 0.05$) from that of the entire class in grade 4 language arts.

The results for the previous year indicate that the former program participants recorded a mean of 686.80, compared to the 700.81 scored by former program participants. Thus, for 1989-90, the high-risk program children outperformed the entire grade 4 class in language arts at a statistically significant level ($p = 0.0204$).

Battery, grade 4 scores. As shown in Table VD, the 1990-91 population mean for the total CAT battery was 694.89, and the mean for former program participants was 696.72. The respective standard deviations were 35.43 and 28.61. The scores ranged from 520 to 809 for the total population, and from 545 to 772 for former program participants. The Z-score of 0.98 computed for these two means was not greater than the 1.96 table score, thus indicating there is no significant difference between the performance of former program participants and that of the entire grade 4 population tested on the total grade 4 CAT battery.

The previous year the former participants outperformed the class as a whole at a level that was statistically significant ($p = 0.0098$). The mean grade 4 battery score for the former participants declined by 11.88 from 1989-90 to 1990-91, while that for the class as a whole increased by 0.70 over this same period. Changes in program guidelines between the second and third years of implementation, as reflected in differing characteristics among participants, may partially explain this decline.

TABLE VC. COMPARISON OF GRADE 4 LANGUAGE ARTS TEST SCORES FOR FORMER PROGRAM PARTICIPANTS WITH THOSE OF ALL REGULAR EDUCATION STUDENTS TESTED

Fourth Grade Student Group	Year	N	Mean	SD	Range	Z	P
All Students Tested	1990-91 1989-90	57,190 57,500	687.78 686.80	38.88 39.62	518-796 518-796		
Former Program Participants Tested	1990-91 1989-90	365 43	690.51 700.81	29.97 31.46	540-769 619-765	1.34 2.32	0.1802 0.0204*

*p < 0.05

TABLE VD. COMPARISON OF GRADE 4 TOTAL BATTERY TEST SCORES FOR FORMER PROGRAM PARTICIPANT WITH THOSE OF ALL REGULAR STUDENTS TESTED

Fourth Grade Student Group	Year	N	Mean	SD	Range	Z	P
All Students Tested	1990-91 1989-90	56,690 57,026	694.89 694.19	35.43 36.13	520-809 520-809		
Former Program Participants Tested	1990-91 1989-90	364 42	696.72 708.60	28.61 29.03	545-77? 613-755	0.98 2.58	0.327 0.0098*

*p < 0.05

National norm comparisons grade 4. Further analysis conducted on the grade 4 CAT results provided information regarding the percent of former program participants who fell into each of the four performance quarters established relative to a nationally-normed group. The distribution of scores of the former program participants was then compared with that of students in the entire grade 4 population tested relative to these quarters.

For comparison purposes, the NRT scores for all students in the national norm group are ranked from highest to lowest. The top 25% are designated as being in Quarter 4. Since these students scored higher than 75% of the students in the norm group tested, their scores are above the 75th percentile. The next 25%, whose scores range from the 51st through the 75th percentiles, fall into Quarter 3. The 25% of the students scoring from the 26th through the 50th percentiles make up Quarter 2. The lowest 25%, those whose scores fall below the 26th percentile, make up Quarter 1. A quarter-by-quarter comparison of the performance of former program participants with that of the total test population for both 1990-91 and 1989-90 is shown in Table VE.

Mathematics, grade 4. In mathematics, 21.7% of the entire population of grade 4 students tested in 1990-91 fell within the fourth Quarter, while 19.5% of the former program participants tested were in Quarter 4. The percentages that scored in Quarter 3 for mathematics were 29.1% for the population and 30.4% for the program participants. In the second quarter the population percentage was 30.5%; that for program participants was 37.5%.

TABLE VE. COMPARISON OF PERCENTAGES OF TOTAL FOURTH GRADE STUDENTS WITH PERCENTAGES OF FORMER PARTICIPANTS SCORING IN EACH QUARTER, 1989-90 AND 1990-91

	1990-91		1989-90	
Quarters and Tests	Entire Group	Former Program Participants Only	Entire Group	Former Program Participants Only
Quarter 4				
Mathematics	21.7	19.5	21.5	40.5
Reading	12.7	9.3	12.7	25.6
Language/Arts	20.5	18.9	20.0	34.9
Battery	16.8	13.5	16.6	38.1
Quarter 3				
Mathematics	29.1	30.4	28.8	23.8
Reading	25.5	28.6	25.6	37.2
Language/Arts	25.2	26.8	25.2	30.2
Battery	25.6	28.6	25.6	28.6
Quarter 2				
Mathematics	30.5	37.5	29.8	28.6
Reading	40.2	45.8	39.6	25.6
Language/Arts	33.5	40.3	33.1	30.2
Battery	36.6	45.1	35.7	26.2
Quarter 1				
Mathematics	18.7	12.6	19.9	7.1
Reading	21.6	16.3	22.2	11.6
Language/Arts	20.8	14.0	21.7	4.7
Battery	21.0	12.9	22.1	7.1

The first quarter consisted of 18.7% and 12.6%, respectively, of the students in the two groups tested. Thus, a smaller proportion of the former participants scored in Quarters 4 and 1 than did the entire class tested in grade 4 mathematics. In comparison, for 1989-90, a larger proportion of the former participants scored in Quarter 4 and a smaller proportion in Quarter 1 than did the class as a whole.

Reading, grade 4. In the reading component of the CAT, the scores of the total population of grade 4 Louisiana students tested were distributed as follows: 12.7% in Quarter 4, 25.5% in Quarter 3, 40.2% in Quarter 2, and 21.6% in Quarter 1. The distribution of the former program participants was 9.3% in Quarter 4, 28.6% in Quarter 3, 45.8% in Quarter 2, and 16.3% in Quarter 1. The proportions of the former participants who scored in both Quarter 4 and in Quarter 1 were less than was the case for the entire class tested.

During 1989-90, a higher percentage of former program participants scored in Quarter 4 than did students in the entire grade 4 population tested. The Quarter 1 scores showed that a smaller percentage of former program participants scored in that range than did the class as a whole.

Language arts, grade 4. For the language arts component of the CAT, 20.5% of the total grade 4 population tested were in Quarter 4, 25.2% in Quarter 3, 33.5% in Quarter 2, and 20.8% in Quarter 1. Of the program participants tested, 18.9% were in the fourth quarter, 26.8% were in Quarter 3, 40.3% were in the second

quarter, and 14.0% were in Quarter 1. Thus, smaller proportions of the former participants scored in Quarters 4 and 1 than was the case for the entire class tested. The previous year the converse was the case for Quarter 4, but the Quarter 1 results were similar to those for 1990-91.

Battery, grade 4. The total battery score comparisons indicate that 16.8% of the grade 4 population tested scored in the fourth quarter, whereas 13.5% of the program participants scored likewise. Among the population tested, 25.6% scored in Quarter 3; for program participants that comparable proportion was 28.6%. Quarter 2 for the total battery consisted of 36.6% of all grade 4 Louisiana students tested and 45.1% of the former program participants. Quarter 1 contained 21.0% and 12.9% of the two groups, respectively. Thus, on the overall grade 4 CAT battery, the proportions of program students in Quarters 4 and 1 were found to be lower than the proportions of the population tested, but higher than that for the populations in Quarters 3 and 2.

On the grade 4 battery the previous year, a larger proportion of the former program participants scored in the topmost quarter (Quarter 4), and a smaller proportion in the lowest quarter (Quarter 1) than did the entire class tested. However, as previously noted, caution must be exercised in comparing the results across two years.

Summation grade 4. In considering the overall results for the students tested on the fourth grade CAT in 1990-91, there was no statistically significant difference between the former

participants and the overall Louisiana population of grade 4 students on the three individual components of the CAT test, nor were any such differences found between the total test battery means. Smaller proportions of the former program participants scored in both Quarters 4 and 1 than did the grade 4 population as a whole in mathematics, reading, language arts, and the total test battery.

4

FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary of Findings

The major findings reached as a result of this comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds are summarized with respect to the major evaluation questions addressed.

Evaluation Question 1: What instructional techniques and methodologies were observed to be in use in local programs for high-risk four-year-olds, and to what extent do these reflect the developmental philosophy inherent in early childhood education?

1A. Developmentally appropriate techniques as defined by the Early Childhood Environment Rating Scale were observed to be in use in local programs.

1B. An examination of the composite results for each of the eight major categories of the Early Childhood Environment Rating Scale indicates that ratings across all categories are relatively consistent.

- The Personal Care Routines and the Language-Reasoning Experiences categories received the highest ratings at 79%.
- The Social Development category received the lowest rating at 73% of the maximum.

1C. Based on the designated scale of 1 through 7 points, instrument items received mean ratings ranging from 4.54 to 5.73.

- Based on a benchmark rating of 5 (indicative of "good"), 25 of the 29 items were rated above 5.0.
- The Art item in the Creative Activities category received the lowest mean rating at 4.54.
- The item observed to have the highest mean rating of 5.73 was Informal Use of Language in the Language - Reasoning Experiences category.

Evaluation Question 2: What is the impact of the State-Funded Program for High-Risk Four-Year-Olds on the performance of program "graduates" now enrolled in third, fourth, and fifth grades, as assessed by the Louisiana Educational Assessment Program?

2A. Former program participants scored significantly lower on the mathematics section of the Grade 3 LEAP test than did the entire grade 3 population tested.

2B. The performance of former program participants on the language arts section of the Grade 3 LEAP test was not significantly different from that of the grade 3 population tested.

2C. The percentage of students attaining the mathematics standards was greater among former program participants than among the total grade 3 population tested.

2D. The percentage of students attaining the language arts standard was lower among the former program participants than among the total grade 3 population tested.

2E. The performance of the former program participants on the mathematics and the language arts sections of the Grade 5 LEAP test was not significantly different from that of the grade 5 population tested.

2F. The percentage of students attaining both the grade 5 mathematics and language arts standards was greater for the former program participants than was the percentage for the total grade 5 population tested.

2G. The performance of former program participants on the mathematics, reading, and language arts sections of the Grade 4 LEAP test was not significantly different than that of the entire grade 4 population tested.

2H. The total battery mean score among former program participants on the Grade 4 LEAP test was not significantly different from that of the entire grade 4 population tested.

2I. For each component of the grade 4 test, the percentage of program participants who scored in Quarter 4, as established by a national norm group, was lower than the percentage of all grade 4 students in Louisiana who scored in this quarter.

2J. For all components of the test, the percentage of program participants who scored in Quarter 1, as established by the norm group, was less than the percentage of all grade 4 Louisiana students who scored in this quarter.

Conclusions

The following conclusions were reached as a result of this comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds:

- Based on the results of the structured observations of program classrooms, local programs are providing developmentally-appropriate classroom settings and teaching methodologies.

- Based on the 1990-91 grade 3 LEAP scores, former participants in the State-Funded Program for High-Risk Four-Year-Olds generally performed as well as the entire grade 3 population tested in both mathematics and language arts.

    - While the mathematics mean score among former program participants was lower than that of the population as a whole, a higher percentage of the former participants attained the performance standard in that area.

    - In language arts, the mean scores among former program participants and the population as a whole were the same, but a lower percentage of the former participants attained the performance standard in that area.

- Based on the 1990-91 grade 5 LEAP scores, former participants in the State-Funded Program for High-Risk Four-Year-Olds generally performed as well as the entire grade 5 population tested in both mathematics and language arts.

    - In mathematics, while the mean scores among former program participants and the population as a whole were the same, a higher percentage of the former participants attained the performance standard in that area.

    - In language arts, the mean scores among former program participants and the population as a whole were the same, and a higher percentage of the former participants attained the performance standard in that area.

- Based on the 1990-91 grade 4 LEAP scores on the CAT, former participants in the State-Funded Program for High-

Risk Four-Year-Olds generally performed as well as the entire grade 4 population tested in all areas tested.

- In mathematics, reading, and language arts, as well as on the total test battery, the mean scores among former program participants and those for the grade 4 population as a whole were the same.

- On all components of the grade 4 CAT, while a lower percentage of the former program participants scored in Quarter 4 than was recorded among the entire population tested, the percentage of former participants who scored in Quarter 1 was also lower than that observed for the population.

Recommendations

The following recommendations are offered as a result of this comprehensive longitudinal evaluation of the State-Funded Program for High-Risk Four-Year-Olds:

- Efforts should continue to be targeted toward the provision of developmentally-appropriate settings and instructional methodologies inherent in good early childhood programs.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. To facilitate the timely provision of accurate, complete data from local project staff, an intensive effort should be made to coordinate all pertinent project data requests with Student Information System personnel to ensure that the data collected will meet all specified needs.

- Efforts directed toward program expansion should continue so that, eventually, every at-risk four-year-old in Louisiana will have access to some type of developmentally-appropriate preschool program.

APPENDIX I.

TABLE 1. STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS OVERVIEW, 1984-85 THROUGH 1990-91

PROGRAM PER PUPIL YEAR EXPENDITURE*	FUNDING		NUMBER OF LEAS	NUMBER OF CHILDREN	COST PER CHILD
	SOURCES	AMOUNTS			
1984-85	State	$ 300,000	10	315	952.38
1985-86	State	2,124,300	37	1112	1910.34
1986-87	State	1,800,000	50	1272	1415.09
1987-88	State	1,700,000	50	1228	1384.36
1988-89	State 8(g)	1,500,000 1,400,000	62	1614	1796.78
1989-90	State 8(g)	1,501,500 1,595,000	62 62	1653	1873.26
1990-91	State 8(g)	1,501,500 2,000,000	63	1751	1999.71
	TOTALS	$ 15,422,300		8945	Mean 1724.13

*K-12 average daily membership (ADM) per pupil expenditures inclusive of both state and local funds were as follows: 1984-85: $2810, 1985-86: $2988; 1986-87: $2920; 1987-88: $2967; 1988-89: $3153 (Source: Bulletin 1472, Annual. Louisiana State Department of Education)

APPENDIX II.

LIST OF STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS EVALUATION REPORTS, 1984-85 THROUGH 1990-91

1984-85

Interim Evaluation Report: 1984-85 Early Childhood Development Projects, April 1985

1985-86

Interim Evaluation Report: 1985-86 Early Childhood Development Projects, April 1986

1986-87

Interim Evaluation Report: 1986-87 Early Childhood Development Program, April 1987

Final Evaluation Report: 1986-87 Early Childhood Development Program, July 1987

1987-88

Interim Evaluation Report: 1987-88 Early Childhood Development Program, March 1988

Final Evaluation Report: 1987-88 Early Childhood Program, September 1988

1988-89

Interim Evaluation Report: 1988-89 State-Funded Program for High-Risk Four-Year-Olds, May 1989

Final Evaluation Report: 1988-89 State-Funded Program for High-Risk Four-Year-Olds, February 1990

1989-90

Evaluation Report: 1989-90 State-Funded Program for High-Risk Four-Year-Olds, July 1990

State-Funded Program for High-Risk Four-Year-Olds: Comprehensive Longitudinal Report, October 1990

1990-91

1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part I. Program Description, November 1991

1990-91 State-Funded Program for High-Risk Four-Year-Olds Evaluation Report: Part II. Follow-up Study, November 1991

APPENDIX III

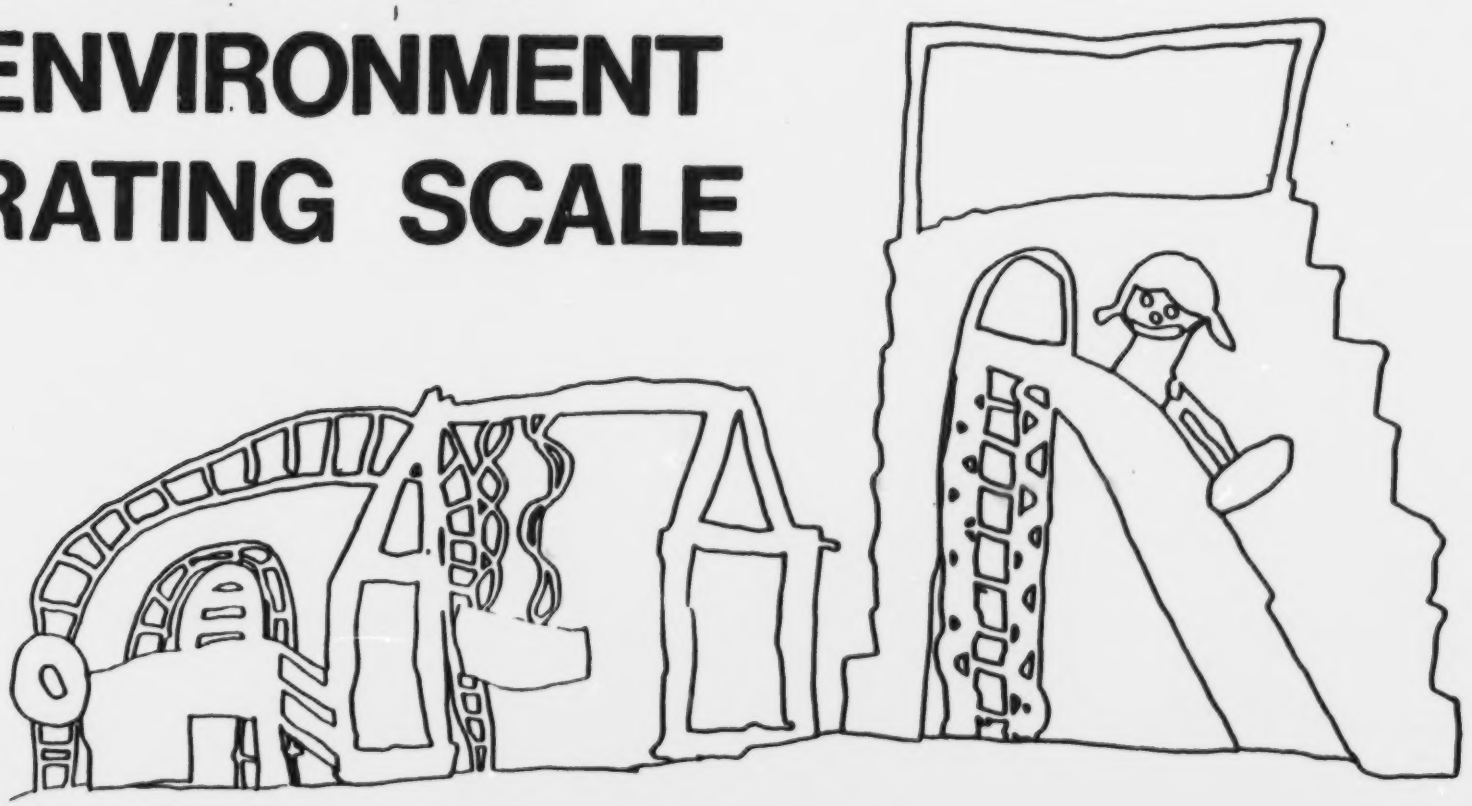
ENVIRONMENT RATING SCALE REVISIONS 1990-91

The following changes have been made on the Environment Rating Scale.

ITEM	CHANGES
4 - For Learning Activities	The "5" category has been changed from "easel or art table" to "easel and art table are available.
20 - Sand/Water	The "7" category has been changed. Daily usage and appropriate covering for outdoor sand areas have been added.
24 - Free Play	The "5" category has been changed to "Free play in learning centers scheduled at least one hour during the day. Free play outdoors scheduled daily."

*Changes in the instrument are reported annually; copies of descriptor pages are on file with the Early Childhood section of the Bureau of Elementary Education.

EARLY CHILDHOOD ENVIRONMENT RATING SCALE



Adapted for the

State-Funded Program for High-Risk Four-Year-Olds

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Personal Care Routines							
1. Greeting/departing	No plans made. Greeting children is often neglected; departure not prepared for.		Informally understood that someone will greet and acknowledge departure.		Plans made to insure warm greeting and organized departure. Early childhoood program staff member(s) has responsibility for greeting and departure of children. The greeting of students entails from the time they arrive on the school grounds. (Ex. Conversation on arrival; art work and clothes ready for departure).		Everything in 5 (Good) plus parents greeted as well as children. Staff use greeting and departure as information sharing time to relate warmly to parents. (If all students are transported on buses and all requirements for a rating of five are met, then a rating of seven will be given.)

(If the observer is not present to see greeting and departure, ask the teacher: "Can you describe what happens daily when a child arrives at and leaves the center?" Look for evidence of plans made by the center to meet criteria described in 5 and 7, such as staff assignments include greeting and departure duties, expression of importance of communication with parents, use of support staff such as a driver to relate to parents, if necessary.)

2. Meals/snacks	Meals/snacks served on a haphazard, irregular schedule, and of questionable nutritional value.		Well-balanced meals/snacks provided on regular schedule, but strict atmosphere, stress on conformity, meals not used as a pleasant social time or to build self-help skills (Ex. pouring milk, setting table, etc.).		Well-balanced meals/ snacks provided on regular schedule. Staff member(s) interacts with children and provides pleasant social environment, at snacks and, when possible during meals (when served). Small group size permits conversation.		Everything in 5 plus time used as a learning experience, including: self-help skills, talking about children's events of the day, and aspects of foods (color, where foods come from).

(Ratings 3 and 5 are based on the social quality, while 7 includes both social and learning experience provided.)

*Adapted from Early Childhood Environment Rating Scale by Thelma Harms and Richard M. Clifford, Teachers College Press, 1980.

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
3. Nap/rest	Nap/rest time or place is inappropriate for children (Ex. too early or late, rest too long or too short, irregular schedule, crowded area, noisy, poor ventilation). Little or no supervision provided.		Nap/rest is scheduled appropriately with some supervision provided. However, problems exist with supervision, atmosphere, or area used.		Nap/rest is scheduled appropriately with supervision provided. Space is adequate and conducive to resting (Ex. good ventilation, quiet, cots placed for privacy).		Everything in 5 plus children helped to relax (Ex. cuddly toy, soft music, back rubbed). Provisions made for early risers and non-nappers.
Furnishings and Display for Children							
4. For learning activities Basic materials: tables and chairs, open shelves for storage of play materials, easel or art table, etc.	Insufficient number of basic learning activity furnishings. Furnishings reflect academic emphasis.		Sufficient number of basic learning activity furnishings in good repair.		Basic learning activity furnishings plus sand/water table, easel and art table are available. Furnishings reflect developmental emphasis.		Full range of learning activity furnishings regularly used plus provision for appropriate independent use by children (Ex. through picture-word labeling or other guidance).
5. For relaxation and comfort	No cushions, rugs, or rocking chair available for children to use; no planned cozy area for children. Lack of awareness of child's need for "softness" in environment. ("Softness" means soft, comfortable places to sit or rest, rugs, and soft toys.)		No planned cozy area for children, although rug may be provided in child's play space. Very little, if any, softness available.		Planned cozy area regularly available to children (Ex. rug, cushions, child sized rocker, or adult rocker). Cozy area may be used for reading or dramatic play. Some softness available.		Planned cozy area plus "softness" available in several other areas (Ex. cushions in reading corner and doll house, several rug areas, many soft toys).

(For half-day programs opportunities for relaxation and comfort may be somewhat more limited than for full-day programs; adjust rating basis accordingly.)

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
6. Room arrangement	No interest centers defined. Room inconveniently arranged (Ex. traffic patterns interfere with activities). Materials with similar use not placed together.		One or two interest centers defined, but centers not well placed in room (Ex. quiet and noisy activities near one another, water not accessible where needed). Supervision of centers difficult, or materials disorganized.		Four or more interest centers defined and conveniently equipped. Water accessible to room, shelving adequate. Quiet and noisy centers separated. Appropriate play space provided in each center (Ex. rug or table area out of flow of traffic). Easy visual supervision of centers.		Everything in 5 plus centers selected to provide a variety of learning experiences. Arrangement of centers designed to promote independent use by children (Ex. labeled open shelves, convenient drying space for art work). Additional materials organized and available to add to or change centers. Running water available in the classroom.

(Rate the potential of the room arrangement, even if you do not observe children using the centers.)

7. Child related display	No materials displayed or inappropriate materials, for age group, such as ditto or color sheets, predominate (Ex. materials designed for school-aged children or church materials.		Commerical materials or teacher made display predominate (Ex. nursery rhymes, ABC's, numbers or seasonal displays not closely related to children's current activities).		Children's work predominates. Some uniform work may be displayed (Ex. same project done by all). Teacher-made display relates closely to current activities. (Ex. charts, pictures, or photos about recent activities, projects, and trips). Many items displayed on child's eye level.		Individualized children's work predominates: variety of materials and topics. Three dimensional objects, e (playdough, clay, carpentry) displayed as well as flat wor

("Uniform work" refers to highly teacher directed products where little individual creativity is possible, for example, following a model to make caterpillars out of egg cartons, making houses or flowers out of precut pieces, finger paintings and drawings, in which children all do same subject in the same way. Since bulletin board displays may vary during holidays and with changes of projects or seasons, ask the teacher whether the items you see displayed are typical of the usual items displayed. To see if teacher made display is closely related to current activities, ask when the display was done and how it is being used.)

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Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Language-Reasoning Experiences							
8. Understanding of language (receptive language) Materials: Books, records, picture lotto and other picture card games, flannel board materials, etc.	Few materials present and little use of materials to help children understand language (Ex. no scheduled story time daily).		Some materials present, but these are not available on regular basis (closed cabinets), not regularly used for language development, or not developmentally appropriate.		Many developmentally-appropriate materials present for free choice and supervised use. At least one planned activity daily (Ex. reading books to children, story telling, flannel board stories, finger plays, etc.).		Everything in 5 plus teacher provides good language model throughout day (Ex. gives clear directions, uses words exactly in descriptions). Plans additional activities for children with special needs.
9. Using language (expressive language) Activities: Puppets, finger plays, singing, rhymes, answering questions, talking about experiences, interpreting pictures, child dictated stories, dramatic play, etc.	No scheduled activities for using language (Ex. no children's planning time, talking about drawings, dictating stories, show 'n tell, etc.).		Some scheduled activities for using language (Ex. show 'n tell), but child language not encouraged throughout the day.		Many scheduled activities for using language available during free play and group times, but not planned specifically for expressive language development.		Daily plans provide a wide variety of activities for using language during free play and group times. Opportunities to develop skills in expressing thoughts are part of a language development plan based on individual needs. Teachers encourage expressive language throughout the day.

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
10. Using learning concepts (reasoning) Materials: Sequence cards, same/different shape toys, sorting games. Classification games Patterns Matching Comparing Prenumber activities with concrete objects, etc.	No games, materials, or activities to extend and encourage reasoning (Ex. no matching, sequencing, categorizing, etc.).		Some games, materials, or activities present, but used with teacher guidance or not readily available.		Sufficient developmentally-appropriate games, materials, and activities available on a regular basis. Children use by choice with teacher available to assist in developing concepts by talking to a child and asking questions to stimulate child's reasoning.		Everything in 5 plus a plan for introducing concepts as children are ready, either individually or in groups. Teacher encourages children to reason throughout the day using actual events and experiences as a basis for development (Ex. children learn sequence by talking about their experiences in the daily routine, or recalling the sequence of a cooking project).
11. Informal use of language	Language outside of group times primarily used by staff to control children's behavior and manage routines.		Staff sometimes talks with children in conversation, but children are asked primarily "yes/no" or short answer questions. Children's talk not encouraged.		Staff-child conversations are frequent. Language is primarily used by staff to exchange information with children and for social interaction. Children are asked "why, how, what if" questions, requiring longer and more complex answers.		Staff makes conscious effort to have an informal conversation with each child everyday. Staff verbally expands on ideas presented by children (Ex. adds information, asks questions to encourage child to talk more).

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Fine and Gross Motor Activities							
12. Perceptual/fine motor Materials: Beads, puzzles, Leggo and small building toys, scissors, crayons, etc.	No developmentally appropriate fine motor/perceptual materials available for daily use.		Some developmentally-appropriate perceptual/fine motor materials available for daily use.		Variety of developmentally appropriate perceptual/fine motor materials in good repair used daily by children. Use of materials encouraged during free choice time.		Everything in 5 plus materials rotated to maintain interest; materials organized to encourage self-help; activities planned to enhance fine motor skills.
13. Supervision (fine motor activities)	No supervision provided when children play with perceptual/fine motor materials.		Supervision only to protect health and safety or stop arguments.		Child given help and encouragement when needed (Ex. to finish puzzle, to fit pegs into holes; shown how to use scissors, etc.). Teachers show appreciation of children's work.		Everything in 5 plus teacher guides children to materials on appropriate level for success. Teacher plans for fine motor development through the use of a variety of activities and materials on different skill levels. (Ex. provides children with puzzles of increasing difficulty, stringing of large beads before small beads).
14. Space for gross motor	No outdoor or indoor space specifically set aside for gross motor/physical play.		Some space specifically set aside outdoors or indoors for gross/motor physical play.		Adequate space outdoors and some space indoors with planned safety precautions. (Ex. fenced in area or area free from danger).		Planned, adequate, safe, varied and pleasant space both outdoors and indoors (Ex. appropriate ground covers, proper drainage.) Indoor space used in bad weather.

(For a rating of 5, space must be adequate for the size of the group using the space. Find out if small groups rotate or if the total group uses the space. Some facilities may have adequate space indoors and some space outdoors (reverse of item) and rate a 5.)

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
15. Gross motor equipment balls riding toys tunnel jump ropes balance beams, etc.	Little gross motor equipment, in poor repair, or not age appropriate.		Some appropriate gross motor equipment but seldom in use (Ex. inaccessible, requires daily moving or set up) or little variety in equipment.		Gross motor equipment is readily available and sturdy; stimulates variety of skills (Ex. crawling, walking, balancing, climbing).		Everything in 5 plus equipment is imaginative, flexible, frequently rearranged by staff and children to maintain interest. Several different pieces of equipment on different levels of skill (Ex. swing set, tire swing, and knotted rope).
16. Scheduled time for gross motor activities	No scheduled physical activity time outdoors or indoors.		Physcial activity time scheduled occasionally.		Regularly scheduled physical activity time daily, both morning and afternoon. Outdoor time scheduled at least once a day, weather permitting.		Regularly scheduled daily physical activity times with some age-appropriate planned physical activity (Ex. play with balls, bean bag games, follow the leader, obstacle course), as well as informal play time.

(A slight variation such as no play time during one morning or afternoon per week is not sufficient to lower the rating of a full day program. Part day programs need one activity period per day for a rating of 5; it could be a supervised recess period for part day programs.)

Creative Activities*

17. Art	Few art materials available; regimented use of materials (Ex. mostly teacher directed projects). Art materials not readily available for children to use as a free choice activity.		Some materials, primarily drawing and painting, available for free choice, but major emphasis on projects that are alike are shown.		Individual expression and free choice encouraged with art materials. Very few projects that are like an example shown. Art center available during free play.		Variety of materials available for free choice, including three dimensional materials (Ex. clay, art dough, collage, etc.) Attempt to relate art activities to other experiences.

*(The term "regimented" use of art materials refers to highly teacher directed projects, whereas "individual expression" refers to products where children determine subject matter themselves. A number of children doing paintings, each of which is different because the children have not been asked to imitate a model or assigned a subject to paint, is considered "individual expression.")

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
18. Music/movement	No specific provisions made for music/movement activities (Ex. no children's records or musical instruments).		Some provisions for musical experiences (Ex. phonograph or musical instruments or singing time), but musical experiences seldom available.		Both planned and informal music time for singing, in addition to musical instruments, or movement provided several times weekly.		Space and time planned for music and movement; variety of phonograph records, dance props. Music provided daily as either free choice or group activity.

(Remember, for a rating of 7, all of 5 must be present.)

19. Blocks	Few blocks and accessories. Not enough space to play with blocks.		No special block area set aside, but space available for block play. Blocks and accessories enough for at least two children to play at one time.		Special block area set aside out of traffic with convenient storage. Space, blocks, and accessories for three or more children at one time. Area available for at least one hour each day. (Half-hour availability for half-day programs is acceptable.)		Special block area with suitable surface (Ex. flat rug). Variety of large and small blocks and accessories, with storage organized to encourage independent use (Ex. with pictures on shelves to show where blocks belong).

(For a 5 or 7, the block area must be available for use by children for substantial portions of the day, either in the room or in another accessible area. The difference between a 5 and 7 is the variety of blocks and accessories, storage organized for ease of independent use, and suitable surface for building. If a long napped rug is used, it might hinder rather than help building.)

Item	Inadequate 1 2	Minimal 3 4	Good 5 6	Excellent 7
20. Sand/water	No provision for sand or water play.	Some provision for sand or water play outdoors or indoors with some accessories available.	Provision for sand or water play outdoors or indoors including a variety of appropriate accessories (Ex. cups, funnels, shovels, pots and pans, trucks, etc.). Used at least weekly.	Provisions for sand and water play outdoors or indoors with appropriate accessories and used daily. Outdoor sand areas appropriately covered.
21. Dramatic play	No special provisions made for dress-up or dramatic play.	Dramatic play props focused on housekeeping roles. Little or no provisions for dramatic play involving transportation, work, or adventure.	Variety of dramatic play props including transportation, work, adventure, fantasy. Space provided in the room or outside the room permitting more active play.	Everything in 5 plus pictures, stories, trips, used to enrich dramatic play.

(For a 5, there must be clear options for play other than housekeeping. Ask the teacher whether there are any other props that are used frequently, but are not stored in the room.).

22. Schedule	Routine care (eating, sleeping, toileting, etc.) takes up most of the day or schedule is too chaotic. Little planning for interesting activities, either indoors or outdoors.	Schedule is too structured, leaving no time for individual interests, or too flexible with frequent disruptions.	Schedule provides balance of structure and flexibility. Several activity periods, some indoors and some outdoors, are planned each day in addition to routine care.	Balance of structure and flexibility, with smooth transitions between activities (Ex. materials ready for next activity before current activity ends).

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Social Development							
23. Supervision (creative activities)	No supervision provided, except if problems occur.		Supervision provided but attention to children is minimal (Ex. attention divided with other tasks, several adults chatting, etc.).		Supervision provided near children. Attention mainly to safety, cleanliness, proper use of materials.		Teacher interacts with children, discusses ideas and helps with resources to enhance play. Recognition of the sensitive balance between child's need to explore independently and adult's opportunity to extend learning.
24. Free play (free choice) Child is permitted to select materials, companions, and as far as possible, manage play independently. Adult interaction is in response to child's needs.	Either little opportunity for free play or much of day spent in unsupervised free play. Inadequate toys, games, and equipment provided for children to use in free play.		Some opportunity for free play, with casual supervision provided as a safety precaution.		Free play in learning centers scheduled at least one hour during the day. Free play outdoors scheduled daily. (Teacher uses as a chance to help think through solutions to conflicts with others encourages child to talk about activity, introduces concept in relation to child's play). Ample and varied toys, games, and equipment provided. Adult supervision provided on a regular basis.		Ample opportunity for supervised free play outdoors and indoors with wide range of toys, games, and equipment. Supervision used as an educational interaction. New materials/experiences for free play added periodically.

(For a 7, find evidence of educational interaction between adults and children, such as, conversations, sharing of information, questioning to encourage a child to speak, helping a child think through and organize dramatic play, helping a child to think through and settle conflicts that result from free play).

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Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
25. Group time (other than sleeping and eating)	Children kept together as whole group most of the day. Few opportunities for adult to interact with one to three children while other children involved in various free choice activities.		Some free play available between group activities; however, all planned activities done as whole group (Ex. all do same art project, read story, listen to record at the same time).		Planning done for small group as well as large group activities. Whole group gatherings limited to short periods suited to age and abilities of children.		Everything in 5 plus different groupings planned to provide a change of pace and to meet individual needs. One-to-one adult-child activities included. Free play and small groups predominate.

(Small group consists of teacher or aide working with 2-5 children; center work is not viewed as small group work for the purposes of this scale.)

26. Cultural awareness	No attempt to include ethnic and racial variety in dolls, book illustrations, or pictorial bulletin board materials. All toys and visible pictures are of one race only.		Some evidence of ethnic and racial variety in toys and pictorial materials (Ex. multi-racial or multi-cultural dolls, books or bulletin board pictures of varied countries and races).		Cultural awareness evidenced by a variety of multi-racial and non-sexist materials (Ex. dolls, illustrations in story books, pictorial bulletin board materials, and learning activities.)		Everything in 5 plus cultural awareness is part of curriculum through planned use of both multi-racial and non-sexist materials. (Ex. including holidays from other religions and cultures, cooking of ethnic foods, introducing a variety of roles for women and men through stories and dramatic play).

(For a 5, non-sexist materials must be included as well as multi-racial materials.)

27. Tone General impression of the quality of interaction.	Staff and children seem strained, voices sound irritable and angry, children cry frequently. Physical contact used principally for control (Ex. hurrying children along).		Adults inattentive and unresponsive when children are calm and happy, but become involved only when problems occur (Ex. infrequent smiling, loud voices).		Calm but busy atmosphere. Children seem happy most of the time. Staff and children seem relaxed, voices cheerful, frequent smiling. Adults show warmth in contact (Ex. gentle holding, hugging). Mutual respect exists among adults and children.		Everything in 5 plus adults prevent problems by careful observation and skillful intervention (Ex. helping children before minor problems become serious, discussing with children ways of settling conflicts). Curriculum includes planning for development of social skills (Ex. through story books and discussion groups).

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Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
Adults							
28. Provisions for parents Information sheets: Rules, approach to education and care, newsletters, bulletin boards, parent conferences, scheduled parent group meetings, and classroom volunteers	No provisions made for parents/staff or parent/ parent information exchange, or parent involvement in program. Parents discouraged from observing or being involved in program.		Parents given minimal information and limited possibilities for involvement (Ex. information only concerning rules, fees, attendance schedule; minimal contact at arrival and departure of children). Little attempt to make parents welcome.		Parent/staff information exchanged at regular intervals (Ex. through parent conferences, newsletters, etc.). Parents made aware of the developmental approach practiced at facility (Ex. through information sheets, parent meetings, etc.). Parents welcomed to be a part of program (Ex. eat lunch with child, share a family custom with child's class.)		Everything in 5 plus provision of information on parenting, health care, etc. Parents' input regularly sought in evaluation of the program.

Provisions to inform and involve parents are important in all types of early childhood programs, including day care, even though parent involvement may be difficult to achieve in a full day program.)

*Adapted from Early Childhood Environment Rating Scale by Harms and Clifford.

PROPOSED ADDITION TO SCALE

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
29. Classroom Management	The teacher takes a passive posture in the classroom with little or no limits. The staff is inattentive and unresponsive to behavior problems. Chaotic classroom behavior. Verbal reprimands frequent. Overly harsh discipline.		Unrealistic expectations for children's age and ability levels. Requires children to sit and be quiet for long periods of time.		Teacher facilitates the development of self-control in children by using positive guidance techniques such as modeling and encouraging expected behavior, redirecting children to a more acceptable activity, and setting clear limits. Teacher expectations match and respect children's developing capabilities.		Children are provided many opportunities to develop social skills, such as cooperating, helping, negotiating, and talking with the person involved, to solve inter-personal problems. Teachers facilitates the development of these positive social skills at all times.

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ENVIRONMENT RATING SCALE

REVISIONS

1990-91

The following changes have been made on the Environment Rating Scale.

ITEM	CHANGES
4 - For Learning Activities	The "5" category has been changed from "easel or art table" to - "easel and art table are available.
20 - Sand/Water	The "7" category has been changed. Daily usage and appropriate covering for outdoor sand areas have been added.
24 - Free Play	The "5" category has been changed to "Free play in learning centers scheduled at least one hour during the day. Free play outdoors scheduled daily."

____Preliminary Visit ____Final Evaluation

EARLY CHILDHOOD ENVIRONMENTAL RATING SCALE TALLY SHEET

SCHOOL SYSTEM _____ SCHOOL _____

PROJECT DIRECTOR _____ LOCATION _____

TEACHER _____ CHECK IF TEACHER IS NEW TO PROJECT _____

EVALUATOR _____ DATE _____

rsonal Care Routines . Greeting/departing 1 2 3 4 5 6 7	3. Nap/rest 1 2 3 4 5 6 7 Total:____	5. For relaxation and comfort 1 2 3 4 5 6 7	7. Child related display 1 2 3 4 5 6 7 Total:____	9. Using language 1 2 3 4 5 6 7
. Meals/snacks 1 2 3 4 5 6 7	Furnishings and Display for Children 4. For learning activities 1 2 3 4 5 6 7	6. Room arrangement 1 2 3 4 5 6 7	Language-Reasoning Experiences 8. Understanding of language 1 2 3 4 5 6 7	10. Using learning concepts 1 2 3 4 5 6 7

11. Informal use of language 1 2 3 4 5 6 7 Total:_____	13. Supervision (fine motor activities) 1 2 3 4 5 6 7	15. Gross motor equipment 1 2 3 4 5 6 7	Creative Activities 17. Art 1 2 3 4 5 6 7	19. Blocks 1 2 3 4 5 6 7
Fine and Gross Motor Activities 12. Perceptual/fine motor 1 2 3 4 5 6 7 23	14. Space for gross motor 1 2 3 4 5 6 7	16. Scheduled time for gross motor activities 1 2 3 4 5 6 7 Total:_____	18. Music/movement 1 2 3 4 5 6 7	20. Sand/water 1 2 3 4 5 6 7 24

21. Dramatic play 1 2 3 4 5 6 7	23. Supervision (creative activities) 1 2 3 4 5 6 7 Total:_____	25. Group time 1 2 3 4 5 6 7	27. Tone 1 2 3 4 5 6 7 Total:_____	29. Classroom Management 1 2 3 4 5 6 7
22. Schedule 1 2 3 4 5 6 7 23.	Social Development 24. Free play 1 2 3 4 5 6 7	26. Cultural awareness 1 2 3 4 5 6 7	Adults 28. Provisions for parents 1 2 3 4 5 6 7 Total:_____	25.

APPENDIX IV

EARLY CHILDHOOD ENVIRONMENTAL RATING SCALE RESULTS BY CATEGORIES, 1990-91

State-level data relative to each item addressed on the Early Childhood Environment Rating Scale are presented in the present appendix. Frequencies indicative of each numerical rating, as well as means, ranges, modes, and standard deviations are provided. Aggregate data for the seven broad categories are presented in the body of the report.

Personal Care Routines

As illustrated in Appendix IV, Table 1, three items within the Early Childhood Environment Rating Scale addressed personal care routines relative to program participants. With respect to Item 1, greeting/departing, a mean rating of 5.68 with a standard deviation of 0.94 was reported among the 59 projects observed. The most frequently reported rating for this item was 5 (among 54%), with the total range of assigned scores being 4 through 7.

The mean rating for the meals/snacks item (Item 2) was observed to be 5.44, with a standard deviation of 0.88. Among the 59 projects rated, the most frequently assigned rating was 5 (among 61%), with the range being from 3 through 7.

For the third item, nap/rest, a mean of 5.55 was reported, with a standard deviation of 0.81. The mode among the 56 projects for which information was available, was 5 (among 64%), with the range being 5 through 7. (This item was not applicable to half-day programs.)

Table 1. Early Childhood Environment Rating Scale Results for Personal Care Routines

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
1. Greeting/departing	No plans made. Greeting children is often neglected; departure not prepared for.		Informally understood that someone will greet and acknowledge departure.		Plans made to insure warm greeting and organized departure. Early childhood program staff member(s) has responsibility for greeting and departure of children. The greeting of students entails from the time they arrive on the school grounds. (Ex. Conversation on arrival; art work and clothes ready for departure).		Everything in 5 (Good) plus parents greeted as well as children. Staff use greeting and departure as information sharing time to relate warmly to parents. (If all students are transported on buses and all requirements for a rating of five are met, then a rating of seven will be given.)

(If the observer is not present to see greeting and departure, ask the teacher: "Can you describe what happens daily when a child arrives at and leaves the center?" Look for evidence of plans made by the center to meet criteria described in 5 and 7, such as staff assignments include greeting and departure duties, expression of importance of communication with parents, use of support staff such as a driver to relate to parents, if necessary.)

N=59	0	0%	0	0%	0	0%	2	3%	32	54%	8	14%	17	29%

Range = 4-7
Mode = 5
Mean = 5.68
STD = 0.94

Note. Instrument adapted from Early Childhood Environment Rating Scale by Thelma Harms and Richard M. Clifford, Teachers College Press, 1980.

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Table 1 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
2. Meals/snacks	Meals/snacks served on a haphazard, irregular schedule, and of questionable nutritional value.		Well-balanced meals/snacks provided on a regular schedule, but strict atmosphere, stress on conformity, meals not used as a pleasant social time or to build self-help skills (Ex. pouring milk, setting table, etc.).		Well-balanced meals/snacks provided on regular schedule. Staff member(s) interacts with children and provides pleasant social environment during meals and, when possible, at snacks. Small group size permits conversation.		Everything in 5 plus time used as a learning experience, including: self-help skills, talking about children's events of the day, and aspects of foods (color, where foods come from).

(Ratings 3 and 5 are based on the social quality, while 7 includes both social and learning experience provided.)

N=59	0 0%	0 0%	1 2%	2 3%	36 61%	10 17%	10 17%

Range = 3-7
Mode = 5
Mean = 5.44
STD = 0.88

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Table 1 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
3. Nap/rest	Nap/rest time or place is inappropriate for children (Ex. too early or late, rest too long or too short, irregular schedule, crowded area, noisy, poor ventilation). Little or no supervision provided.		Nap/rest is scheduled appropriately with some supervision provided. However, problems exist with supervision, atmosphere, or area used.		Nap/rest is scheduled appropriately with supervision provided. Space is adequate and conducive to resting (Ex. good ventilation, quiet, cots placed for privacy).		Everything in 5 plus children helped to relax (Ex. cuddly toy, soft music, back rubbed). Provisions made for early risers and non-nappers.
N=56	0 0%	0 0%	0 0%	0 0%	36 64%	9 16%	11 20%

Range = 5-7
Mode = 5
Mean = 5.55
STD = 0.81

Total for Personal Care Routines (maximum =21):

N=56 Mean = 16.68 Range = 13-21 STD = 2.00

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Overall, for the total Personal Care Routines category, a mean of 16.68 (based on a maximum of 21) was found, with a standard deviation of 2.00. The range among the 56 projects for which data relative to all three component items were available was within the 13 through 21 span of total scores.

Furnishings and Display for Children

Ratings on the four items assessed within this category of the rating scale are presented in Appendix IV, Table 2. The mean rating relative to the availability of such furnishings and displays for learning activities (Item 4) for the 59 projects rated was found to be 5.54 with a standard deviation of 1.00. A mode of 5 (among 42% of the projects) was observed; the score range was reported as 4 to 7.

With respect to such furnishings for relaxation and comfort (Item 5), a mean of 5.49 was observed among the 59 projects, with a standard deviation of 0.88. The mode within the 4 through 7 range was 5 (among 56%).

Among the 59 projects for which room arrangement ratings were given (Item 6), a mean of 5.29 with a standard deviation of 1.00 was reported. The most frequently assigned rating was 5 (among 42%). The range of reported scores was from 2 through 7.

The mean rating with respect to the child-related display (Item 7) was 5.20 among the 59 projects rated; the standard deviation was 1.20. Within the 3 through 7 range of reported scores, 4 (among 34%) was the rating most frequently assigned, but 31% of the classrooms were assigned a rating of 5 on this item.

Table 2. Early Childhood Environment Rating Scale Results for Furnishings and Display for Children

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
4. For learning activities Basic materials: tables and chairs, open shelves for storage of play materials, easel or art table, etc.	Insufficient number of basic learning activity furnishings. Furnishings reflect academic emphasis.		Sufficient number of basic learning activity furnishings in good repair.		Basic learning activity furnishings plus sand/water table, easel and art table are available. Furnishings reflect developmental emphasis.		Full range of learning activity furnishings regularly used plus provision for appropriate independent use by children (Ex. through picture-word labeling or other guidance).
N=59	0 0%	0 0%	0 0%	8 14%	25 42%	12 20%	14 24%

Range = 4-7
Mode = 5
Mean = 5.54
STD = 1.00

5. For relaxation and comfort	No cushions, rugs, or rocking chair available for children to use; no planned cozy area for children. Lack of awareness of child's need for "softness" in environment. ("Softness" means soft, comfortable places to sit or rest, rugs, and soft toys.)		No planned cozy area for children, although rug may be provided in child's play space. Very little if any, softness available.		Planned cozy area regularly available to children (Ex. rug, cushions, child sized rocker, or adult rocker). Cozy area may be used for reading or dramatic play. Some softness available.		Planned cozy area plus "softness" available in several other areas (Ex. cushions in reading corner and doll house, several rug areas, many soft toys).

(For half-day programs opportunities for relaxation and comfort may be somewhat more limited than for full-day programs; adjust rating basis accordingly.)

N=59	0 0%	0 0%	0 0%	4 7%	33 56%	11 19%	11 19%

Range = 4-7
Mode = 5
Mean = 5.49
STD = 0.88

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Table 2 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
6. Room arrangement	No interest centers defined. Room inconveniently arranged (Ex. traffic patterns interfere with activities). Materials with similar use not placed together.		One or two interest centers defined, but centers not well placed in room (Ex. quiet and noisy activities near one another, water not accessible where needed). Supervision of centers difficult, or materials disorganized.		Four or more interest centers defined and conveniently equipped. Water accessible to room, shelving adequate. Quiet and noisy centers separated. Appropriate play space provided in each center (Ex. rug or table area out of flow of traffic). Easy visual supervision of centers.		Everything in 5 plus centers selected to provide a variety of learning experiences. Arrangement of centers designed to promote independent use by children (Ex. labeled open shelves, convenient drying space for art work). Additional materials organized and available to add to or change centers. Running water available in the classroom.

(Rate the potential of the room arrangement, even if you do not observe children using the centers.)

N=59	0 0%	1 2%	0 0%	10 17%	25 42%	16 27%	7 12%

Range = 2-7
Mode = 5
Mean = 5.29
STD = 1.00

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Table 2 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
7. Child related display	No materials displayed or inappropriate materials for age group predominate (Ex. materials designed for school-aged children or church materials).		Commercial materials or teacher made display predominate (Ex. nursery rhymes, ABC's, numbers or seasonal displays not closely related to children's current activities).		Children's work predominates. Some uniform work may be displayed (Ex. same project done by all). Teacher-made display relates closely to current activities. (Ex. charts, pictures, or photos about recent activities, projects, and trips). Many items displayed on child's eye level.		Individualized children's work predominates: variety of materials and topics. Three dimensional objects, etc. (playdough, clay, carpentry) displayed as well as flat work.

("Uniform work" refers to highly teacher directed products where little individual creativity is possible, for example, following a model to make caterpillars out of egg cartons, making houses or flowers out of precut pieces, finger paintings and drawings, in which children all do same subject in the same way. Since bulletin board displays may vary during holidays and with changes of projects or seasons, ask the teacher whether the items you see displayed are typical of the usual items displayed. To see if teacher made display is closely related to current activities, ask when the display was done and how it is being used.)

N=59	0	0%	0	0%	1	2%	20	34%	18	31%	6	10%	14	24%

Range = 3-7
Mode = 4
Mean = 5.20
STD = 1.20

Total for Furnishings and Display for Children (maximum = 28):

N=59 Range = 16-28 Mean = 21.53 STD = 3.28

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Across the four items within the composite Furnishings and Display for Children category, a mean of 21.53 (based on a maximum of 28) was reported among the 59 classrooms. A standard deviation of 3.28 was computed. Total scores ranged from 16 through 28.

Language-Reasoning Experiences

As illustrated in Appendix IV, Table 3, four items were addressed within this category. Among the 59 projects rated on understanding of language or receptive language development (Item 8), the reported mean was 5.60, with a standard deviation of 0.84. The mode of 5 was observed among 56% of the classrooms observed. Scores in this area ranged from 4 through 7.

Ratings relative to Item 9 (using language) reflected a mean of 5.61 and a standard deviation of 0.87 for the 59 projects rated. Within the 4 through 7 point range of reported scores, the rating of 5 was most frequently awarded (among 44% of the projects).

For Item 10 (using learning concepts) a mean of 5.34 was observed among the 59 projects rated; the standard deviation was reported to be 1.10. The rating of 5 was most frequently observed (among 44%) within the 3 through 7 reported score range.

The mean for Item 11 (informal use of language) was 5.73. The standard deviation among the 59 classrooms rated was 1.23. The mode of 5 was recorded among 46% of the projects, with the assigned scores ranging from 1 through 7.

With respect to the overall Language-Reasoning Experiences category, a mean of 22.24 (maximum=28) with a standard deviation of

Table 3. Early Childhood Environment Rating Scale Results for Language-Reasoning Experiences

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
8. Understanding of language (receptive language) Materials: Books, records, picture lotto and other picture card games, flannel board materials, etc.	Few materials present and little use of materials to help children understand language (Ex. no scheduled story time daily).		Some materials present, but these are not available on regular basis (closed cabinets), not regularly used for language development, or not developmentally appropriate.		Many developmentally-appropriate materials present for free choice and supervised use. At least one planned activity daily (Ex. reading books to children, story telling, flannel board stories, finger plays, etc.).		Everything in 5 plus teacher provides good language model throughout day (Ex. gives clear directions, uses words exactly in descriptions). Plans additional activities for children with special needs.
N=59	0 0%	0 0%	0 0%	2 3%	33 56%	13 22%	11 19%

Range = 4-7
Mode = 5
Mean = 5.60
STD = 0.84

Table 3 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
9. Using language (expressive language) Activities: Puppets, finger plays, singing, rhymes, answering questions, talking about experiences, interpreting pictures, child dictated stories, dramatic play.	No scheduled activities for using language (Ex. no children's planning time, talking about drawings, dictating stories, show 'n tell, etc.).		Some scheduled activities for using language (Ex. show 'n tell), but child language not encouraged throughout the day.		Many scheduled activities for using language available during free play and group times, but not planned specifically for expressive language development.		Daily plans provide a wide variety of activities for using language during free play and group times. Opportunities to develop skills in expressing thoughts are part of a language development plan based on individual needs. Teachers encourage expressive language throughout the day.

N=59	0 0%	0 0%	0 0%	4 7%	26 44%	18 31%	11 19%

Range = 4-7
Mode = 5
Mean = 5.61
STD = 0.87

Table 3 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
10. Using learning concepts (reasoning) Materials: Sequence cards, same/different shape toys, sorting games. Classification games Patterns Matching Comparing Prenumber activities with concrete objects, etc.	No games, materials, or activities to extend and encourage reasoning (Ex. no matching, sequencing, categorizing, etc.).		Some games, materials, or activities present, but used with teacher guidance or not readily available.		Sufficient developmentally-appropriate games, materials, and activities available on a regular basis. Children use by choice with teacher available to assist in developing concepts by talking to a child and asking questions to stimulate child's reasoning.		Everything in 5 plus a plan for introducing concepts as children are ready, either individually or in groups. Teacher encourages children to reason throughout the day using actual events and experiences as a basis for development (Ex. children learn sequence by talking about their experiences in the daily routine, or recalling the sequence of a cooking project).
N=59	0 0%		0 0%	1 2%	12 20%	26 44%	6 10%	14 24%

Range = 3-7
Mode = 5
Mean = 5.34
STD = 1.10

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Table 3 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
11. Informal use of language	Language outside of group times primarily used by staff to control children's behavior and manage routines.		Staff sometimes talks with children in conversation, but children are asked primarily "yes/no" or short answer questions. Children's talk not encouraged.		Staff-child conversation are frequent. Language is primarily used by staff to exchange information with children and for social interaction. Children are asked "why, how, what if" questions, requiring longer and more complex answers.		Staff makes conscious effort to have an informal conversation with each child everyday. Staff verbally expands on ideas presented by children (Ex. adds information, asks questions to encourage child to talk more).
N=59	1 2%	0 0%	2 3%	0 0%	27 46%	7 12%	22 37%

Range = 1-7
Mode = 5
Mean = 5.73
STD = 1.23

Total for Language-Reasoning Experiences (maximum = 28):

N=59 Range = 14-28 Mean = 22.24 STD = 3.41

3.41 was reported. Total scores within this category ranged from 14 through 28.

Fine and Gross Motor Activities

This category of the rating scale consists of five items in Appendix IV, Table 4. With respect to Item 12 (perceptual/fine motor) a mean of 5.42 was reported, with a standard deviation of 1.00. The most frequently reported score of 5 was observed among 44% of the projects. Assigned scores ranged from 3 through 7.

The mean score reported for the ratings assigned to supervision of fine motor activities (Item 13) was 5.26 for the 57 projects rated, with a standard deviation of 0.88. Within the 3 through 7 point range of reported scores, the mode of 5 was observed relative to 54% of the high-risk four-year-old classrooms.

For Item 14 (space for gross motor activities), a mean of 5.47 with a standard deviation of 1.19 was reported. The most frequently reported rating within the 1 through 7 point observed range was 5 (among 39% of the projects).

The mean rating for the gross motor equipment item (Item 15) was 5.49, with a standard deviation of 1.09. Within the reported 2 through 7 point score range, the mode of 5 was observed with respect to 44% of the projects.

Among the 59 projects for which scheduled time for gross motor activities ratings were assigned (Item 16), a mean of 5.64 was observed, with a standard deviation of 0.91. The mode observed within the 4 through 7 point reported range was 5 (among 44%).

Table 4. Early Childhood Environment Rating Scale Results for Fine and Gross Motor Activities

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
12. Perceptual/fine motor Materials: Beads, puzzles, Leggo and small building toys, scissors, crayons	No developmentally appropriate fine motor/ perceptual materials available for daily use.		Some developmentally-appropriate perceptual/fine motor materials available for daily use.		Variety of developmentally appropriate perceptual/fine motor materials in good repair used daily by children. use of materials encouraged during free choice time.		Everything in 5 plus materials rotated to maintain interest; materials organized to encourage self-help; activities planned to enhance fine motor skills.
N=59	0 0%	0 0%	1 2%	8 14%	26 44%	13 22%	11 19%

Range = 3-7
Mode = 5
Mean = 5.42
STD = 1.00

13. Supervision (fine motor activities)	No supervision provided when children play with perceptual/fine motor materials.		Supervision only to protect health and safety or stop arguments.		Child given help and encouragement when needed (Ex. to finish puzzle, to fit pegs into holes; shown how to use scissors, etc.). Teachers show appreciation of children's work.		Everything in 5 plus teacher guides children to materials on appropriate level of success. Teacher plans for fine motor development through the use of a variety of activities and materials on different skill levels (Ex. provides children with puzzles of increasing difficulty, stringing large beads before small beads).
N=57	0 0%	0 0%	1 2%	7 12%	31 54%	12 21%	6 11%

Range = 3-7
Mode = 5
Mean = 5.26
STD = 0.88

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Table 4 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
14. Space for gross motor activities	No outdoor or indoor space specifically set aside for gross motor/ physical play.		Some space specifically set aside outdoors or indoors for gross/motor physical play.		Adequate space outdoors and some space indoors with planned safety precautions. (Ex. fenced in area, or area free from danger).		Planned, adequate, safe, varied and pleasant space both outdoors and indoors (Ex. appropriate ground covers proper drainage. Indoor space used in bad weather.

(For a rating of 5, space must be adequate for the size of the group using the space. Find out if small groups rotate or if the total group uses the space. Some facilities may have adequate space indoors and some space outdoors (reverse of item) and rate a 5.)

N=59	1 2%	0 0%	2 3%	5 9%	23 39%	15 25%	13 22%

Range = 1-7
Mode = 5
Mean = 5.47
STD = 1.19

Table 4 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
15. Gross motor equipment balls riding toys tunnel jump ropes balance beams, etc.	Little gross motor equipment, in poor repair, or not age appropriate.		Some appropriate gross motor equipment but seldom in use (Ex. inaccessible, requires daily moving or set up) or little variety in equipment.		Gross motor equipment is readily available and sturdy; stimulates variety of skills (Ex. crawling, walking, balancing, climbing).		Everything in 5 plus equipment is imaginative, flexible, frequently rearranged by staff and children to maintain interest. Several different pieces of equipment on different levels of skill (Ex. swing set, tire swing, and knotted rope).
N=59	0 0%	1 2%	1 2%	5 9%	26 44%	13 22%	13 22%

Range = 2-7
Mode = 5
Mean = 5.49
STD = 1.09

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Table 4 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
16. Scheduled time for gross motor activities	No scheduled physical activity time outdoors or indoors.		Physical activity time scheduled occasionally.		Regularly scheduled physical activity time daily, both morning and afternoon. Outdoor time scheduled at least once a day weather permitting.		Regularly scheduled daily physical activity times with some age-appropriate planned physical activity (Ex. play with balls, bean bag games, follow the leader, obstacle course), as well as informal play time.

(A slight variation such as no play time during one morning or afternoon per week is not sufficient to lower the rating of a full day program. Part day programs need one activity period per day for a rating of 5; it could be a supervised recess period for part day programs.)

N=59	0 0%	0 0%	0 0%	4 7%	26 44%	16 27%	13 22%

Range = 4-7
Mode = 5
Mean = 5.64
STD = 0.91

Total for Fine and Gross Motor Activities (maximum = 35):

N=57 Range = 19-35 Mean = 27.40 STD = 3.75

The mean rating across the five items within the Fine and Gross Motor Activities category was 27.40 (maximum=35) for the 57 projects rated on all items; the standard deviation was 3.75. The range of reported scores varied from 19 through 35 points.

Creative Activities

The seven items addressed within the creative activities section of the Early Childhood Environment Rating Scale are shown in Appendix IV, Table 5. With respect to the first such item, art, a mean of 4.54 was observed, with a standard deviation of 1.52. Scores assigned to this item ranged from 1 through 7, with 4 being the mode (among 27%).

For the music/movement item (Item 18) a mean rating of 5.31 was recorded, with a standard deviation of 0.88. Assigned scores ranged from 3 through 7, with 5 being the mode (among 50%).

Item 19, blocks, was assigned a mean assessment of 5.44; the standard deviation was found to be 1.04. The most frequently reported rating was 5, (among 46%) with scores ranging from 3 through 7.

The mean rating for the sand/water item, (Item 20) was 5.53 with a standard deviation of 1.18 for the 59 projects rated. The mode of 5 was reported for 42% of the projects. Scores ranged from 3 through 7.

Dramatic play, Item 21, received a mean score of 4.95 with a standard deviation of 1.11. Ratings of 5 were most often reported (among 41%). Scores ranged from 3 through 7.

Table 5. Early Childhood Environment Rating Scale Results for Creative Activities

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
17. Art	Few art materials available; regimented use of materials (Ex. mostly teacher directed projects). Art materials not readily available for children to use as a free choice activity.		Some materials, primarily drawing and painting, available for free choice, but major emphasis on projects that are alike are shown.		Individual expression and free choice encouraged with art materials. Very few projects that are like an example shown. Art center available during free play.		Variety of materials available for free choice, including three dimensional materials (Ex. clay, art dough collage, etc.) Attempt to relate art activities to other experiences.

*(The term 'regimented" use of art materials refers to highly teacher directed projects, whereas "individual expression" refers to products where children determine subject matter themselves. A number of children doing paintings, each of which is different because the children have not been asked to imitate a model or assigned a subject to paint, is considered "individual expression.")

N=59	1 2%	6 10%	6 10%	16 27%	14 24%	9 15%	7 12%

Range = 1-7
Mode = 4
Mean = 4.54
STD = 1.52

Table 5 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
18. Music/movement	No specific provisions made for music/movement activities (Ex. no children's records or musical instruments).		Some provisions for musical experiences (Ex. phonograph or musical instruments or singing time), but musical experiences seldom available.		Both planned and informal music time for singing, in addition to musical instruments, or movement provided several times weekly.		Space and time planned for music and movement; variety of phonograph records, dance props. Music provided daily as either free choice or group activity.

(Remember, for a rating of 7, all of 5 must be present.)

N=59	0 0%	0 0%	1 2%	7 12%	30 50%	15 25%	6 10%

Range = 3-7
Mode = 5
Mean = 5.31
STD = 0.88

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Table 5 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
19. Blocks	Few blocks and accessories. Not enough space to play with blocks.		No special block area set aside, but space available for block play. Blocks and accessories enough for at least two children to play at one time.		Special block area set aside out of traffic with convenient storage. Space, blocks, and accessories for three or more children at one time. Area available for at least one hour each day. (Half-hour availability for half-day programs is acceptable.)		Special block area with suitable surface (Ex. flat rug). Variety of large and small blocks and accessories, with storage organized to encourage independent use (Ex. with pictures on shelves to show where blocks belong).

(For a 5 or 7, the block area must be available for use by children for substantial portions of the day, either in the room or in another accessible area. The difference between a 5 and 7 is the variety of blocks and accessories, storage organized for ease of independent use, and suitable surface for building. If a long napped rug is used, it might hinder rather than help building.)

N=59	0 0%	0 0%	1 2%	8 14%	27 46%	10 17%	13 22%

Range = 3-7
Mode = 5
Mean = 5.44
STD = 1.04

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Table 5 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
20. Sand/water	No provision for sand or water play.		Some provision for sand or water play outdoors or indoors, with some accessories available.		Provision for sand or water play outdoors or indoors including a variety of appropriate toys (Ex. cups, spoons, funnels, shovels, pots and pans, trucks, etc.). Used at least weekly.		Provisions for sand and water play outdoors or indoors with appropriate accessories used daily. Outdoor sand areas appropriately covered.
N=59	0 0%	0 0%	5 9%	2 3%	25 42%	11 19%	16 27%

Range = 3-7
Mode = 5
Mean = 5.53
STD = 1.18

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
21. Dramatic play	No special provisions made for dress-up or dramatic play.		Dramatic play props focused on housekeeping roles. Little or no provisions for dramatic play involving transportation, work, or adventure.		Variety of dramatic play props including transportation, work, adventure, fantasy. Space provided in the room or outside the room permitting more active play.		Everything in 5 plus pictures, stories, trips, used to enrich dramatic play.

(For a 5, there must be clear options for play other than housekeeping. Ask the teacher whether there are any other props that are used frequently, but are not stores in the room.)

N=59	0 0%	0 0%	5 9%	15 25%	24 41%	8 14%	7 12%

Range = 3-7
Mode = 5
Mean = 4.95
STD = 1.11

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Table 5 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
22. Schedule	Routine care (eating, sleeping, toileting, etc.) takes up most of the day. Little planning for interesting activities either indoors or outdoors.		Schedule is too structured, leaving no time for individual interests, or too flexible with frequent disruptions.		Schedule provides balance of structure and flexibility. Several activity periods, some indoors and some outdoors, are planned each day in addition to routine care.		Balance of structure and flexibility, with smooth transitions between activities (Ex. materials ready for next activity before current activity ends).
N=59	0 0%	0 0%	0 0%	5 9%	34 58%	10 17%	10 17%

Range = 4-7
Mode = 5
Mean = 5.42
STD = 0.88

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
23. Supervision (creative activities)	No supervision provided, except if problems occur.		Supervision provided but attention to children is minimal (Ex. attention divided with other tasks, several adults chatting, etc.).		Supervision provided near children. Attention mainly to safety, cleanliness, proper use of materials.		Teacher interacts with children, discusses ideas and helps with resources to enhance play. Recognition of the sensitive balance between child's need to explore independently and adult's opportunity to extend learning.
N=59	0 0%	0 0%	0 0%	2 4%	26 44%	18 31%	13 22%

Range = 4-7
Mode = 5
Mean = 5.71
STD = 0.85

Total for Creative Activities (maximum = 49):
N=59 Range = 25-48 Mean = 36.90 STD = 5.52

The mean rating for the creative activities schedule (Item 22) was found to be 5.42; the standard deviation was 0.88. Within the 4 through 7 point range of reported scores, the mode was 5 (among 58% of the programs).

Item 23, supervision of creative activities, was assigned a mean score of 5.71 with a standard deviation of 0.85. Scores ranged from 4 through 7, with the mode being 5 (among 44%).

Across the entire Creative Activities category, the overall mean was computed to be 36.90 (maximum=49) for the 59 classrooms which were rated in all of the seven items. The standard deviation was 5.52. Reported score totals ranged from 25 through 48.

Social Development

The four items examined within the Social Development category of the observation instrument are described in Appendix IV, Table 6. With respect to the first (Item 24), free play, a mean of 5.36 with a standard deviation of 1.04 was observed. Within the 3 through 7 point range of reported scores, a rating of 5 was most frequently observed (among 46%).

The group time item (other than sleeping and eating), Item 25, received a mean rating of 4.81 and a standard deviation of 0.99. The mode of 4 was observed among 37% of the projects, while 36% of the classrooms received a rating of 5, assigned scores ranged from 3 through 7.

Item 26, cultural awareness, received a mean score of 4.68 with a standard deviation of 0.99. This item received the lowest overall rating on the observation instrument. The mode of 4 was

Table 6. Early Childhood Environment Rating Scale Results for Social Development

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
24. Free play (free choice) Child is permitted to select materials, companions, and as far as possible, manage play independently. Adult interaction is in response to child's needs.	Either little opportunity for free play or much of day spent in unsupervised free play. Inadequate toys, games, and equipment provided for children to use in free play.		Some opportunity for free play, with casual supervision provided as a safety precaution.		Free play in learning centers scheduled at least one hour during the day. Free play outdoors scheduled daily. (Teacher uses as a chance to help child think through solutions to conflicts with others, encourages child to talk about activity, introduces concept in relation to child's play). Ample and varied toys, games, and equipment provided. Adult supervision provided on a regular basis.		Ample opportunity for supervised free play outdoors and indoors with wide range of toys, games, and equipment. Supervision used as an educational interaction. New materials/experiences for free play added periodically.

(For a 7, find evidence of educational interaction between adults and children, such as, conversations, sharing of information, questioning to encourage a child to speak helping a child think through and organize dramatic play, helping a child to think through and settle conflicts that result from free play).

N=59	0	0%	0	0%	1	2%	10	17%	27	46%	9	15%	12	20%

Range = 3-7
Mode = 5
Mean = 5.36
STD = 1.04

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Table 6 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
25. Group time (other than sleeping and eating)	Children kept together as whole group most of the day. Few opportunities for adult to interact with one to three children while other children involved in various free choice activities.		Some free play available between group activities; however, all planned activities done as whole group (Ex. all do same art project, read story, listen to record at the same time).		Planning done for small group as well as large group activities. Whole group gatherings limited to short periods suited to age and abilities of children.		Everything in 5 plus different groupings planned to provide a change of pace throughout the one-to-one adult-child activities included. Free play and small groups predominate.

(Small group consists of teacher or aide working with 2-5 children; center work is not viewed as small group work for the purposes of this scale.)

N=59	0	0%	0	0%	3	5%	22	37%	21	36%	9	15%	4	7%

Range = 3-7
Mode = 4
Mean = 4.81
STD = 0.99

26. Cultural awareness	No attempt to include ethnic and racial variety in dolls, book illustrations, or pictorial bulletin board materials. All toys and visible pictures are of one race only.		Some evidence of ethnic and racial variety in toys and pictorial materials (Ex. multi-racial or multi-cultural dolls, books or bulletin board pictures of varied countries and races).		Cultural awareness evidenced by a variety of multiracial and non-sexist materials (Ex. dolls, illustrations in story books, pictorial bulletin board materials, and learning activities).		Everything in 5 plus cultural awareness is part of curriculum through planned use of both multi-racial and non-sexist materials. (Ex. including holidays from other religions and cultures, cooking of ethnic foods introducing a variety of roles for women and men through stories and dramatic play).			

(For a 5, non-sexist materials must be included as well as multi-racial materials.)

N=59	0	0%	1	2%	2	3%	25	42%	22	37%	5	9%	4	7%

Range = 2-7
Mode = 4
Mean = 4.68
STD = 0.99

Table 6 continued

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
27. Tone General impression of the quality of interaction.	Staff and children seem strained, voices sound irritable and angry, children cry frequently. Physical contact used principally for control (Ex. hurrying children along).		Adults inattentive and unresponsive when children are calm and happy, but become involved only when problems occur (Ex. infrequent smiling, loud voices).		Calm but busy atmosphere. Children seem happy most of the time. Staff and children seem relaxed, voices cheerful, frequent smiling. Adults show warmth in contact (Ex. gentle holding, hugging). Mutual respect exists among adults and children.		Everything in 5 plus adults prevent problems by careful observation and skillful intervention (Ex. helping children before minor problems become serious, discussing with children ways of settling conflicts). Curriculum includes planning for development of social skills (Ex. through story books and discussion groups).

N=59	0 0%	1 2%	2 3%	4 7%	25 42%	6 10%	21 36%

Range = 2-7
Mode = 5
Mean = 5.63
STD = 1.23

Total for Social Development (maximum = 28):

N=59 Range = 13-28 Mean = 20.47 STD = 3.25

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observed among 42% of the projects. The range of assigned scores was 2 through 7.

Tone (Item 27) assessed the general impression of the observer relative to the quality of interaction between the teacher and students. A mean score of 5.63 was reported for this item. The standard deviation was 1.23. The most frequently reported score was 5 (among 42% of the classrooms). The range of scores was 2 through 7.

The overall mean across the four items within the Social Development category was 20.47 (maximum=28); the standard deviation was 3.25. Score totals ranged from 13 through 28.

Adults

The one item addressed in this category examined the mechanisms in place for informing and involving the parents of program participants. As illustrated in Appendix IV, Table 7, among the 59 projects for which data were provided, a mean of 5.39 was found, with a standard deviation of 0.91. The mode of 5 was observed among 54% of the classrooms visited. Reported scores ranged from 4 through 7. Since only one item was examined within this category, the category score is identical to the item score.

Classroom Management

The one item in this category (Item 29, shown in Appendix IV, Table 8) received a mean rating of 5.36 with a standard deviation of 1.20. The most frequently reported score was 5 (among 39%) and the range of scores was 2 through 7. The category score is the same as the item score.

Table 7. Early Childhood Environment Rating Scale Results for Adults

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
28. Provisions for parents Information sheets: Rules, approach to education and care. Newsletter Bulletin board Parent conferences Scheduled parent group meetings Parent meeting and conference space	No provisions made for parents/staff or parent/parent information exchange, or parent involvement in program. Parents discouraged from observing or being involved in program.		Parents given minimal information and limited possibilities for involvement (Ex. information only concerning rules, fees, attendance schedule; minimal contact at arrival and departure of children). Little attempt to make parents welcome.		Parent/staff information exchanged at regular intervals (Ex. through parent conferences, newsletters, etc.). Parents made aware of approach practiced at facility (Ex. through information sheets, parent meetings, etc.). Parents welcomed to be a part of program (Ex. eat lunch with child, share a family custom with child's class).		Everything in 5 plus provision of information on parenting, health care, etc. Parents' input regularly sought in planning and evaluation of program.

(Provisions to inform and involve parents are important in all types of early childhood programs, including day care, even though parent involvement may be difficult to achieve in a full day program.)

N=59	0	0%	0	0%	0	0%	7	12%	32	54%	10	17%	10	17%

Range = 4-7
Mode = 5
Mean = 5.39
STD = 0.91

Total for Adults (maximum = 7):

N=59 Range = 4-7 Mean = 5.39 STD = 0.91

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Table 8. Early Childhood Environment Rating Scale Results for Classroom Management

Item	Inadequate 1	2	Minimal 3	4	Good 5	6	Excellent 7
29. Classroom Management	The teacher takes a passive posture in the classroom with little or no limits. The staff is inattentive and unresponsive to behavior problems. Chaotic classroom behavior. Verbal reprimands frequent. Overly harsh discipline.		Unrealistic expectations for children's age and ability levels. Requires children to sit and be quiet for long periods of time.		Teacher facilitates the development of self-control in children by using positive guidance techniques such as modeling and encouraging expected behavior, redirecting children to a more acceptable activity, and setting clear limits. Teacher expectations match and respect children's developing capabilities.		Children are provided many opportunities to develop social skills, such as cooperating, helping, negotiating, and talking with the person involved, to solve inter-personal problems. Teachers facilitates the development of these positive social skills at all times.
N=59	0 0%	2 3%	1 2%	8 14%	23 39%	13 22%	12 20%

Range = 2-7
Mode = 5
Mean = 5.36
STD = 1.20

Total for Classroom Management (maximum=7):

N=59 Range = 2-7 Mean = 5.36 STD = 1.20

*Adapted from Early Childhood Environment Rating Scale by Harms and Clifford.

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APPENDIX V.

EXECUTIVE SUMMARY
1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS
EVALUATION REPORT: PART I. PROGRAM DESCRIPTION

Program Purpose and Background

The State-Funded Program for High-Risk Four-Year-Olds is one of several programs designed to increase the readiness of preschool-aged children for success in school. Collectively, Head Start, ESEA Chapter 1, the Special Education Pre-School Screening Program, the State-Funded Program for High-Risk Four-Year-Olds, and other smaller programs presently serve approximately three-fourths of the eligible high-risk children. This proportion is a marked increase from the 55 percent served last year; nevertheless, approximately 6,815 of the at-risk four-year-old children in the state could not be served in 1990-91.

The State-Funded Program for High-Risk Four-Year-Olds was initiated through Act 619 of the 1984 Legislative session. It has expanded from 10 Local Education Agencies (LEAs) serving 315 children, funded at a total of $300,000 in the 1984-85 school year, to 63 of the 66 LEAs serving 1751 children and funded from the State and the Quality Education Trust Fund 8(g) totalling $3,501,500 in 1990-91. A total of 8945 children have been served since 1984.

Management and Organization of the Evaluation

In addition to individual project evaluation reports from the LEAs, required by statute, the Bureau of Elementary Education has continued to request that the Bureau of Evaluation and Analytical Services conduct annual overall evaluations of the implementation and effectiveness of the program. The present report is Part I of the three-part 1990-91 evaluation report series. Part I provides a comprehensive program description; Part II will provide follow-up study findings, and Part III will provide both classroom observation findings and the results of a comprehensive longitudinal study of pupil progression.

The purpose of the overall evaluation is to provide information to decision-makers at the state and local levels to assist them in making judgements about the extent to which the intended goals of this early childhood education program in the public schools have been attained and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing administrators of individual projects with information for use in decision-making about continuing, modifying, or developing new projects for high-risk four-year-old children.

In the following paragraphs the three evaluation questions to be addressed by Part I will be stated, and the conclusions and recommendations relating to each will be provided.

Conclusions and Recommendations

Evaluation Question 1: What are the characteristics of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

The LEAs, choosing to participate in the program, continue and expand their participation as funding and space are available. One LEA entered the program for the first time in 1990-91; 12 have been in the program 3 years; 12 for 5 years; 29 for 6 years, and 9 for 7 years. Most LEAs opt for full-day rather than the half-day programs. Most classes enroll the maximum number of children permissible. Currently, all participating LEAs have at least one full-time teacher and one full-time aid in each program classroom.

The program is, in the view of participating LEA staff members, in keeping with recognized principles of effective preschool education. Respondents to the Project Description Survey rate the instructional program itself as the major strength of the individual projects. The developmental approach is identified as the major factor in program effectiveness. This approach is defined by the Adapted Early Childhood Environmental Rating Scale which is used in classroom observation by state supervisors. In the assessment of pupil progress, nearly all of the teachers (97-98%) use classroom observation and parent interviews. All teachers (100%) use pretests and posttests.

Transportation, to ensure that eligible children have access to participate in the State-Funded Program for High-Risk Four-Year-Olds, remains a problem at some sites. Although most (77.8%) of the LEAs believe the eligible children have sufficient transportation, three (11.1%) believe those who are most in need do not have access, and two indicate an access problem by one-half or fewer of the eligible children in their school systems.

All LEAs are in compliance with the participant selection criteria. In 1990-91 seventy-seven of the eighty-eight teachers in the State-Funded Program for High-Risk Four-Year-Olds had nursery (N) and/or kindergarten (K) teaching certificates. The others fulfill the provisions for the temporary certificate or Circular 665 approval. The number and proportion of N and K-certificated teachers have improved since the inception of the program in 1984-85.

The characteristics of the participating children appear to be those that are generally associated with high risk of school failure and dropping out of school. Since some LEAs did not provide complete and timely responses to all items on the Project Description Survey, some conclusions are still subject to change.

Approximately two-thirds of the children are black, and one-third are white. All of the children come from homes with annual incomes under $15,000. Nearly one-half of the heads of household are unemployed; most, for whom information was reported, are unskilled laborers. All LEAs use a state-approved screening instrument in the selection of children.

Parental involvement is an integral part of the State-Funded Program for High-Risk Four-Year-Olds. Over one-half of the LEAs involve parents in workshops and meetings, social activities for the children, and field trips. About one-fourth of the LEAs engage them in making materials, helping with art projects, reading to the children, and helping the children in the cafeteria. Others use a variety of other parental involvement activities.

Program strengths identified by over one-half of the LEAs are: (1) strengths of the developmental approach, (2) administrative and staff support, (3) quality of teachers and aides, and (4) early intervention. Traits generally recognized in the literature of the field, but cited less frequently by the LEAs, suggest focal points for continuing program improvement: (1) parent involvement, (2) community support, (3) health and medical services, and (4) quality of facilities.

Most frequently cited weaknesses were predominantly fiscal, managerial, and articulation problems: (1) late and/or insufficient funding and (2) the eligibility criterion on family income. The weakness citations reinforce the conclusion that there is a need to improve parental involvement. Over one-third (34.9%) of the LEAs express concern for the small numbers of participating parents, and nearly one-third (30.2%) cite the need for more participation in instructional areas. Some weaknesses cited suggest a need to target and coordinate delivery of resources and services, e.g., to improve health and to improve transportation services.

Recommendations. It is recommended that the Bureau of Elementary Education consider the following recommendations in the continuing effort to maintain and to improve the quality of the State-Funded Program for High-Risk Four-Year-Olds:

1. that the program be expanded to increase accessibility to eligible children not now served

2. that the Annual State Conference for the State-Funded Program for High-Risk Four-Year-Olds staff continue to provide a training session for project staff members, with particular attention to improvement of the accuracy, timeliness, and completeness of

reports submitted by the local education agencies

3. that a training session on the components of an effective parental involvement program be provided for project staff members

4. that a study be conducted and that recommendations be made to the State Board of Elementary and Secondary Education on the basis of the relative merits of using a fixed amount or sliding scales for the family income criterion for eligibility

5. that staff continue to be encouraged to coordinate services (e.g., transportation and health services) and to avail themselves of interagency coordination opportunities.

Question 2: What is the per pupil expenditure in local school system projects for the 1990-91 State-Funded Program for High-Risk Four-Year-Olds?

There are 92 children in half-day classes in 1990-91; the total allocation for these classes is $89,916. Per pupil, the average half-day allocation is $977. There are 1659 children in full-day classes in 1990-91; the total allocation for these children is $3,411,584. Per pupil, the average full-day allocation is $2,056. The average per pupil allocation for all of the children is $2,000. Although differences in the data bases preclude precise comparisons, generally these figures compare favorably with per pupil costs for grades K-12. The most recent available figures show the K-12 average was $3153 in 1988-89.

Analyses show that 49,680 pupil contact hours were provided through half-day classes and 1,791,720 pupil contact hours were provided through full-day classes. The per pupil contact-hour cost for the half-day classes was $1.81. The very small proportion of LEAs that continue to offer half-day classes results in both the full-day and the composite (half-day and full-day) classes having costs per pupil contact hour of $1.90.

Recommendation. The 1990-91 findings in response to Question 2 do not suggest a need for recommendations regarding per pupil expenditures by the local projects.

Question 3: What proportion of Louisiana's high-risk four-year-old children are participating in the State-Funded Program for High-Risk Four-Year-Olds?

The number of live births in Louisiana in 1986 was 77,944. These children were four-year-olds in 1990. Approximately one-third (32.9%, N=25,643) are from families with incomes under $15,000. Computation shows that the 1751 children served by the State-Funded Program for High-Risk Four-Year-Olds in 1990-91 constitute only 6.8% of those eligible with respect to the income criterion.

Dividing the number of eligible children (25,643) into the total number of children served by the program (18,828) yields a Service-to-Eligibility ratio of 73.4. This figure is a marked improvement over 1989-90 when the ratio was 55.3.

Recommendation. The 1990-91 findings in response to Question 3 point up the previously stated recommendation to make the program accessible to all eligible children (Question 1, Recommendation 1).

EXECUTIVE SUMMARY
1990-91 STATE-FUNDED PROGRAM FOR HIGH-RISK FOUR-YEAR-OLDS
EVALUATION REPORT: PART II. FOLLOW-UP STUDY

The State-Funded Program for High-Risk Four-Year-Olds was initiated through Act 619 of 1984. It has expanded from 10 Local Education Agencies (LEAs) serving 315 children, funded at a total of $300,000 in the 1984-85 school year, to 63 of the 66 LEAs serving 1751 children, with 1990-91 funding from both the State and the Quality Education Trust Fund 8(g) in the amount of $3,501,500. A total of 8945 children have been served by the program since 1984. The purpose of the program is to improve the readiness of preschool-aged children who are eligible to enter kindergarten the following year and who are at risk of being insufficiently ready for the regular school program.

In addition to individual project evaluation reports required by statute from LEAs, the Bureau of Elementary Education has continued to request that the Bureau of Evaluation conduct annual comprehensive evaluations of the implementation and effectiveness of the program. The present report is Part II of the three-part 1990-91 evaluation report series. Part I provided a comprehensive program description; Part II provides follow-up study findings; and Part III will provide both classroom observation findings, and the findings of a longitudinal study involving state test results.

The purpose of the overall evaluation is to provide information to decision-makers at the state and local levels to assist them in making judgments about the extent to which the intended goals of this early childhood education program in the public schools have been attained and about potential modifications needed relative to the operation and administration of the program. The evaluation also supplements local project evaluations, thus providing administrators of individual projects with information for use in decision-making about continuing, modifying, or developing projects for high-risk four-year-old children.

This follow-up study (Part II of the evaluation report) focuses on both the grade level progression and present classroom performance of former participants in the State-Funded Program for High-Risk Four-Year-Olds. Locating all students who participated in the program through years subsequent to their participation is not fully within the present technical capabilities of local school systems. Despite such limitations grade placement data were obtained from 56% of the total number of students who had participated in the program. Among these program graduates now enrolled in pre-kindergarten through fifth grade, 78% were found to be on grade level in terms of their progression through school. When compared to their present peers, between 61% and 98% of these graduates were rated by their present teachers as being on line with, or slightly above class average, in each of the seven

developmental areas addressed by the program. The developmental area in which these students were most consistently given high ratings was that of gross motor skills.

Conclusions

The following conclusions were reached as a result of this follow-up study:

- As evidenced by the grade level progression and subsequent classroom performance of program graduates, the State-Funded Program for High-Risk Four-Year-Olds has had a positive effect on the preparation of participants for the regular school program.

- The accessibility of student longitudinal information on former program participants is decreasing as students progress through school.

Recommendations

The following recommendations are offered on the basis of this evaluation of the 1990-91 State-Funded Program for High-Risk Four-Year-Olds:

- As evidenced by the positive impact of the program on the subsequent classroom performance of former participants, the State-Funded Program for High-Risk Four-Year-Olds should be continued, and a concerted effort made to secure increased funding so that more at-risk four-year-olds can be served.

- Longitudinal studies of former program participants should be continued in order to assess the sustained effects of the program on the subsequent classroom performance of program graduates. In order to facilitate this, as well as other longitudinal studies, it is strongly recommended that a student identification and information system be implemented statewide so that the impact of all monies directed toward education can be more accurately measured.